

THE GOLD STANDARD
IN THEORY AND PRACTICE

By the same Author

ECONOMIC REBIRTH
ECONOMIC DESTINY
A CENTURY OF BANK RATE
BRETTON WOODS For Better or Worse

THE GOLD STANDARD IN THEORY AND PRACTICE

BY
R. G. HAWTREY

FIFTH EDITION

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PREFACE TO THE FIFTH EDITION

THIS book was originally composed of four lectures, which were delivered at the invitation of the Institute of Bankers in November and December, 1926, and appeared in the Institute's Journal for January-April, 1927.

When a new edition became necessary in 1939, the opportunity was taken to revise the original lectures and weld them together with new material which had been added in the second and third editions.

The original lectures had been composed for an audience who were familiar with the technicalities of banking. In revising them I endeavoured to make them as far as possible self-explanatory, in the hope that the book would be of use to the general reader as well as to the student.

The present edition brings that of 1939 up to date. No very extensive alterations have been necessary. Little needs to be said about the gold standard during the war years 1939-45 (pp. 221-4), and the principal addition is that at the end of the book relating to the Bretton Woods plan and the future.

A short passage (pp. 79-80) relative to the respective costs of coining gold and silver fills a gap in the history of the adoption of the gold standard as set out in previous editions.

I have now retired from the Government service, but as I am still engaged on work for the Treasury, I ought

to say that what I write represents only my personal views, and is not to be associated in any way with my past official position or my present official work.

R. G. HAWTREY

January, 1947

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CHAPTER I

CREDIT AND THE GOLD STANDARD

A Medium of Exchange

IN examining the nature and purpose of a Gold Standard, our first step ought to be to form a clear idea of what is meant by a *Standard*, that is to say, a *Monetary Standard*.

Money is very commonly defined to be a medium of exchange. A commodity, it is said, is chosen for this purpose, and people who come to market avoid the inconvenience and complication of bartering one product against another by selling one product for an agreed quantity of the chosen commodity, which they then use to buy whatever other product they require. The chosen commodity is the standard. It becomes a generally accepted measure of value as well as a medium of exchange.

The precious metals have been generally chosen by mankind as the most suitable commodities for this purpose. Economists have at times been inclined to teach that this usage is so firmly established that it approximates to a moral principle, as if the use of a metallic currency were somehow essential to honest dealing.

Credit, it is said, is a means of economizing gold and silver. A right to receive gold serves as well as the gold itself, if all that is required is a medium. A dealer in cotton who buys cotton only to sell it again need not enter into physical possession of any actual cotton: he can buy the right to receive cotton of specified quantity

and quality at a specified date, and can resell his right to someone else. It is only when the right to receive cotton is acquired by a manufacturer that actual cotton has to be handed over to be spun into yarn.

In the same way, so long as gold is needed only as a medium of exchange, the right to receive gold fulfils the requirements, and it is only when the right is acquired by someone such as a manufacturer of plate, jewellery, gold leaf or fountain pens, who wants to use it as a material of industry, that the right need be exercised, and metal handed over.

This account of the nature of money is familiar to everyone. It has the great advantage of being intelligible and self-consistent, and it has often proved useful as a practical guide. Unfortunately although it is an *approximation* to the true theory of money, it is by no means perfect or exact, and I propose to approach the subject from a different angle.

Money and Debts

If we turn to the actual institutions by which the money of a civilized country is governed, we shall find that the foundation is always a law prescribing by what means a *debt may legally be discharged*. In technical language it prescribes what is "legal tender." The law never says what may or must be used as a medium of exchange. Anyone is free to use anything as a medium of exchange. The idea of money is derived from the idea of a debt.

At first sight that conclusion may appear to be the merest pedantry or sophistry. For if the idea of money is derived from the idea of a debt, is it not equally true that the idea of a debt is derived from the idea of money?

Can a debt have any other meaning than an obligation to pay money? To separate the debt from the money with which it is payable seems as transcendental an operation as to separate the grin from the Cheshire cat.

And yet it is in practical life even more than in theory that the separation requires to be made. So long as all goes smoothly, it is convenient and legitimate to think of a debt as meaning nothing but an obligation to deliver a specified quantity of gold or silver or legal tender paper money. But in practical life, and especially in that part of it which is concerned with currency, smoothness is the exception, and superficially plausible assumptions are found to break down.

The law prescribes the means by which a debt may be discharged. A debt is one of the fundamental concepts of economics. It must not be thought of as arising only from the borrowing of money or from the postponement of payment. Every sale of goods or service rendered gives rise to a debt. The quotation of a price is an offer to create a debt. The debt may be immediately discharged, but that does not affect its nature from the point of view of the means of payment. If a hat is offered for sale at 45s. and I buy it, I become indebted for 45s., and the law determines by what means I can pay the debt, whether I pay on the spot or at a future date.

The Clearing of Debts

Now debts are not in practice discharged only with legal tender money. A debt can be paid *by being set off against another debt*. The process can be seen in its simplest form where two traders are both buying from and selling to one another. Each records his debts and credits in his books, and they settle periodically by

paying the net balance, which may be quite small in comparison with the total. This net balance may even be carried forward repeatedly from one account to the next.

All debts cannot be settled so, because anyone's debtors are usually a different set of people from his creditors. Nevertheless, this method of settlement can be indefinitely extended if there is some third party to whom creditors can assign their rights against their debtors, and upon whom they can then draw to pay their own debts.

This is the place filled by a banker. He is primarily one who offers facilities for clearing or setting off debts. It is convenient to combine with this function that of short-term lending. The banker is the debtor of his depositors, and short-term debts such as bills and advances are the most convenient assets to hold (along with money) against these liabilities. But where the two functions are separated, it is the clearing of debts, not the short-term lending, which distinguishes the banker.

A depositor can pay his own creditors by assigning to them a portion of the bank's indebtedness to himself. That is what is meant by "drawing" on the banker. A cheque is an instrument for assigning a debt. The debt or "deposit" is due from the banker to the drawer, and the drawer in effect assigns his rights in it to the payee. When the payee endorses it and pays it into his own banking account, he is assigning it to his banker, who thereupon becomes indebted to him for an equal amount, and settles accounts, through the clearing, with the banker on whom the cheque was drawn. The clearing itself involves the payment of net balances from bank to bank, but these balances need not be paid with legal tender money. The banks may all keep balances

with a central bank, such as the Bank of England, and draw cheques for the payment of their clearing balances.

Under normal conditions the Central Bank undertakes to pay its obligations in money, so that any of the debts settled at the clearing can readily be paid in money. And where payment in metallic money has not been maintained, the Central Bank's own notes have usually been made legal tender, and have thus themselves become "money" in the eye of the law.

But this is not necessarily or always so. In 1797 the Bank of England suspended gold payments, and was forbidden by law to pay its notes in money. Nevertheless the notes were not made legal tender. A Bank of England note remained nothing more than documentary evidence of a debt due from the Bank, with the attributes of a negotiable instrument. When the notes depreciated, gold coin ceased to circulate, and the business of the country was carried on for some years without any standard money at all. Debts in fact were settled by being set off against other debts. In those days, it is true, payment with credit money was effected by means of banknotes much more than by cheques. But a banknote, like a cheque, is a means of assigning a debt due from a banker from one creditor to another, and banks presented one another's notes for payment in much the same way as they cleared cheques. Under this system the means of paying any debt was another debt; the debts possessed an existence independent of money.

In this case indeed convention took the place of law, and the Bank of England note became a customary standard. But other cases have occurred where bank credit has become temporarily divorced from money, and no Central Bank has existed as a rallying point. The great financial crises from which the United States

suffered from time to time, before the Federal Reserve Act of 1913 set up a system of Central Banks, afford examples. One feature of the crises of 1907, 1893, 1873 and 1857 was that the banks suspended payment of their depositors in cash, and, while a premium on legal tender money appeared, the use of cheques continued and the machinery of clearing remained in operation. Depositors with credit balances could discharge their liabilities with cheques, but, if they wanted money, had to buy it as if it were a commodity. On some occasions even wages were paid by cheque. It was a noteworthy feature of the crisis of 1873 that there were *three* different media of payment. Inconvertible paper was still the principal form of legal tender money; gold, which was used in foreign trade transactions, was at a premium over paper; and paper was at a premium over bank credit.

It would not be correct to say that people attributed value to bank credit solely or even mainly because they expected that at some future time the bankers would resume payment of their debts in money. All that people were concerned to ascertain before they accepted cheques was that the cheques would be honoured through the clearing house, that their own accounts would be credited with the amount, and that they in turn could then draw cheques and use their credit as a means of payment. The inability to get money save at a premium was felt not as something which struck at the foundations of the monetary system, but merely as a rather vexatious practical inconvenience.

Currency and Money of Account

Bank credit has become the principal medium of payment. Money, even standard money of unlimited legal

tender, is no more than a subsidiary medium. Bank of England notes, like silver or bronze coins, are used for the smaller payments, for which cheques are not convenient. The banks supply notes, and used to supply sovereigns, to their customers for this purpose, just as they supply silver coin.

We have seen that bank credit *can* exist without money. That does not mean that this is a desirable state of things, but it enables us to understand the proposition that the idea of money is dependent on that of a debt, while that of a debt is not dependent on that of money. A debt, it is true, is reckoned, like money, in pounds, shillings and pence. But that is because money, being essentially that with which debts can legally be discharged, must be reckoned in the same units as debts. These familiar units form what is called our "money of account." The money of account in any country may be defined as the units in which debts are reckoned; it is the basis of all book-keeping and of all pecuniary contractual relations. A sovereign is a coin, but a pound is not. The Coinage Acts valued a sovereign at a pound. That means that they prescribed that a debt of a pound might be discharged with a sovereign. The Currency and Bank Notes Act of 1914 gave the same debt-paying power to a one-pound currency note. The note differed from the sovereign in that it had no name independent of its value in terms of the money of account; nevertheless the distinction between the debt and the note with which it was paid remains valid. The word "shilling" is ambiguous, meaning equally a twentieth part of a pound and the coin with which a debt of that amount may be paid. An enactment making a coin or note money has no meaning unless the units in which it values the coin or note are already known. The

money of account must exist before the money.

It may be pointed out that a Bank of England note itself represents a *debt*. The currency notes issued from 1914 to 1928 were *merely* money; they were legally on just the same footing as coin, and did not represent an *obligation* from the Government or the Bank of England or anyone else. The banknote represents a debt due from the Bank of England, and delivery of the note assigns the rights in that debt from one person to another, just like payment by cheque. The Bank of England note has been legal tender ever since 1833. That means that a debtor may legally discharge his obligations by assigning to his creditor the rights against the Bank of England represented by the notes. Till 1925 the Bank was obliged to pay its notes in coin though the prohibition of the export of gold from 1919 made the obligation a nominal one. After the passage of the Gold Standard Act, though the notes remained in form promises to pay, the Bank's obligation to pay became inoperative.

The term "currency" covers both coin and notes, whether legal tender or not; it is "hand to hand" money.

Bank Credit and the Price Level

All payments could be made with bank credit provided that the solvency of the banks was adequately safeguarded, and that banknotes of small denominations were put in circulation for the smaller payments.

But a bank can create credit out of nothing. When a bank grants an advance to a trader, two debts are created, one from the trader to the bank, which is payable at a future date, bears interest and is included in the assets

of the bank, the other from the bank to the trader, which the trader can assign away by cheque, and so use as a means of payment.

If the banks were left free to create credit as they pleased, there would be nothing to maintain any semblance of constancy in the wealth-value or purchasing power of the monetary unit. If they increased the supply of the means of payment, they would cheapen it. The wealth-value of the monetary unit, that is to say, its value in goods and services, would fall, or in other words the prices of goods and services would rise. Likewise if the banks restricted credit and brought about a scarcity of the means of payment, prices would fall.

When we speak of prices or the "price level" rising or falling in this way, we mean that an influence is at work to raise or lower *all* prices, apart from any changes in supply or demand affecting particular commodities. A price expresses a relation between monetary units on the one hand and a commodity on the other. A change in the price may be traceable to an increase or decrease in the supply of the commodity or to an intensification or diminution of the consumers' desire for it. Or on the other hand the change may arise from the other term of the relation, the monetary unit. If people are in a position to offer more monetary units for a given supply of goods and services, prices will rise. If they have fewer monetary units to offer, prices will fall.

The Consumers' Income

The amount of monetary units which people have to offer is the total of their incomes. Suppose a country with a national income of £520 millions, or say

£10,000,000 a week. That means that the total demand for goods and services of all kinds averages £10,000,000 a week. But, it may be asked, do not people save a part of this? Certainly. But so far as what is saved is invested and made available directly or indirectly for capital outlay on such things as houses, means of transport, industrial plant, etc., it is *spent*. The output of such things must be included in the supply upon which the weekly sum of £10,000,000 is spent.

Now if this weekly expenditure of £10,000,000 were increased by 10 per cent., while production of all kinds remained unchanged, prices would very soon rise by about 10 per cent. Of course the amount spent day by day may easily vary more than 10 per cent. A purely temporary increase in spending would not affect prices. It would be met by sales of goods already in stock at existing prices. For a time even a more sustained increase in spending might be so met, but the effect would be to deplete traders' stocks of goods, and presently they would be driven to raise prices to check this process.

In currency theory the total of incomes expressed in terms of money is so fundamental that it is convenient to have a name for it. I call it the "consumers' income," and the expenditure from it I call the "consumers' outlay." "Consumer" here means what lawyers call a "physical person," to the exclusion of merely "legal persons," companies or incorporated bodies which are treated as persons by a legal fiction. Only a physical person or consumer can enjoy an income. A trading concern in the form of a company or partnership may be the means of earning incomes, but the incomes are those of the shareholders or partners, who are capable of being consumers. The consumers' income of a *nation* is

simply the national income reckoned in terms of money.

When the consumers' income increases relatively to the volume of production, so that there is a rise in the price level, the currency may be said to depreciate. The French national income increased from 36 milliards of francs in 1913 to 245 milliards in 1929. Nearly all the apparent increase was due to a sixfold rise in the price level, though there was also a real increase in productive power in the form of a substantial increase in output in spite of shorter working hours.

When the consumers' income decreases, there is a fall in the price level, and the currency appreciates. But there is an additional complication in that case. For the falling off in demand is felt partly in diminished industrial activity accompanied by unemployment. So far as manufacturing is concerned, there is not only a fall of prices but also a reduction of output. If wages and prices could be instantaneously reduced in a sufficient proportion to permit of full employment with the diminished consumers' income, the fall in the price level would correspond precisely with the rise in the wealth-value of the currency unit. But, failing that condition, the true monetary position is to some extent disguised.

When we are making comparisons over a period of time, we must take account of changes in the real costs of production. If technological progress increases the output of a community relatively to its productive resources in the shape of labour and capital, there will be a fall in prices which does not represent any diminution of demand, and does not cause any monetary disequilibrium. If there is a scarcity of some natural products, the price level will be raised, but that will not imply a depreciation of the currency.

Consumers' and Traders' Balances

Changes in the consumers' income and the consumers' outlay are inseparably bound up with another factor, that is, the total stock of the means of payment in the hands of the community. This I call the "unspent margin." It is the total of currency and bank credit in the hands of everyone who receives and pays money, whether individuals, businesses, public bodies or any others; it is so much of their money receipts as they have at any time retained unspent. It is also the aggregate of the currency and bank deposits found by adding together the deposits shown in the bankers' books and the currency issued into circulation outside the banks and not withdrawn.

For every individual there is a relation between his balance of currency and bank credit and his income. Though his balance varies rapidly up and down, it does not usually exceed a limit representing the maximum amount that he is content to see idle. When the limit is passed, he will invest a part of his balance. The casual variations between this maximum and zero will have a fairly constant average. The existence of such an average for each individual results in a sufficiently constant relation holding between the total of consumers' balances, and the consumers' income.

Traders' balances are likewise related to their receipts and disbursements. But their behaviour is complicated by the prevalence of temporary borrowing, which enables those traders who resort to it to keep their balances within narrow limits. And those traders who dispense with temporary borrowing are apt, at times when their business is employing less working capital than usual, to accumulate large idle balances.

But in spite of these irregularities the unspent margin, in the circumstances of any given moment, represents on the whole the cash balances which people, whether consumers or traders, find it convenient to hold.

Bank Lending and the Consumers' Income

Increased lending on the part of the banks increases the unspent margin, for lending actually creates cash. The due proportion between incomes and cash balances is thereby disturbed and has to be restored. The total of bank deposits may be compared to a reservoir, into which is being poured the daily amount lent by the banks, and out of which flows the daily amount repaid to the banks. If these two streams are equal, the amount of deposits remains unchanged. If the stream of lending is increased, the additional money lent is quickly used by the borrowers in the acquisition of goods, and becomes the income of those who take part in producing the goods. Traders' profits are increased, at first by more rapid sales, then by higher prices. Wages follow. In fact the consumers' income is increased.

The recipients of these additional incomes spend them. In so far as they buy goods, they enable the traders who sell them to repay a corresponding part of their indebtedness to the banks. In so far as they buy securities, they enable the dealers in the stock markets likewise to reduce their indebtedness. Thus when the stream of lending is increased, there ensues an increase, though probably a smaller one, in the stream of repayments. The actual increase in the contents of the reservoir in any period is equal to the excess of lending over repayments. The flow through the reservoir is increased by the additional lending and borrowing,

and this stream in the course of its passage takes the form of an addition to the consumers' income.

In the same way the banks, by restricting the amount they lend, can diminish the flow through the reservoir, and curtail the consumers' income.

We shall return later on to this matter of the effect of an increase or decrease in lending, an expansion or contraction of credit as it is called, upon incomes and expenditures and prices. The essential thing to observe is that the action of the banks in accelerating or retarding their lending has an immediate effect upon the volume of incomes and of spending, and prices must soon respond. To keep the variations of prices within reasonable limits, the banks must somehow be prevented from lending either too much or too little.

The Supply of Currency

While a portion of the unspent margin is composed of bank deposits, the rest is composed of currency. If the currency portion is limited, the credit portion cannot be indefinitely increased. That is so even when, as in England or the United States, the credit portion is far the greater. It is possible, by regulating the supply of currency, to control indirectly the supply of bank credit.

And here is one of the principal functions of the gold standard. The supply of gold is limited, and, if currency is gold, the supply of currency is limited.

Paper money, if it is issued in unrestricted quantities, can do nothing to keep the lending operations of the banks within limits. It is often supposed that the excessive issue of paper money only occurs when the power of issue is abused by governments. The most sensational cases of over-issue and collapse have origin-

ated in this way. But over-issue may also occur, and does occur, through excessive lending by banks to traders. There is always a temptation to lend too much. Lending is the source of the banker's profit, and he seeks to lend as much as he can, unless there is some definite reason to the contrary, such as a shortage of cash reserves. And whenever the banks do succeed in increasing their lending, the effect is felt in a stimulation of sales by traders. A vicious circle is then set up, for the bigger and more profitable their business, the more the traders want to borrow, while the more the bankers lend, the greater the stimulation of trade.

Therefore people who carry on the business of banking for profit cannot be expected to exercise a check upon lending. If there is to be such a check, there must somewhere be an influence at work which does not depend on profit-making. This influence is to be found in the authority which issues currency.

Where paper money is the only currency, the authority, whether the Government or a Central Bank of Issue, which issues the paper money has absolute control over the situation. It can at any time cut short the supply of currency and put pressure upon the ordinary banks to curtail their lending, or if need be it can stimulate them to lend by issuing abundant supplies of currency.*

This power places a heavy responsibility upon the note-issuing authority. It is sure to be difficult to decide in any particular set of circumstances whether there is a danger of credit being unduly expanded or contracted and whether any countervailing action is called for.

* Or it can deprive itself of the power by creating money for its own use, without providing any means of withdrawing the money.

Gold Coin as Currency

The gold standard may be regarded as a device for enabling the authority through which currency is issued to solve this problem in a rough and ready way. The classical form of the gold standard is that based on the free coinage of gold. Legal tender currency consists of gold coin (supplemented by a limited amount of subsidiary token coin of silver and base metal). The currency-issuing authority is a Mint, which does not issue notes, but undertakes to turn gold bullion into coin free of charge for all comers. The gold coin is simply a little ingot of gold of which the weight and fineness are certified by the Mint which produced it. It is not a finished product but a piece of material suitably graded and branded. In order that it may pass as such, there must be freedom to melt and export the coin, so that the gold can be sold in world markets.

If that condition is fulfilled, the commodity, gold, is really established as the means of payment. Every debt has become an obligation to deliver gold. All discretion on the part of the currency-issuing authority has been completely eliminated; the process has become mechanical. The supply of currency is simply the supply of gold; it is increased by the output of the mines and possibly by the melting down of plate and other gold manufactures, and is decreased by the industrial demand for gold as a material and by wear and tear.

The value of the monetary unit is equated to the value of a specified quantity of gold, and the value of gold is determined, like that of any other commodity, by free dealings in a market.

The use of gold coin for this purpose is by no means a perfectly efficient device. Indeed currency history up

to the invention of banknotes and paper money was mainly a record of the shortcomings of coin as a basis for a metallic standard, whether gold or silver. It was impossible, till modern mechanical methods were introduced, to achieve exactitude in the manufacture of coin. The certificate of weight and fineness given by the Mint was therefore only reliable within a certain degree of approximation. Moreover coins in circulation are exposed to a gradual loss of weight through legitimate wear and tear, which increases the inequalities. And finally the value of even small quantities of the precious metals is such as to lead people to clip or sweat the coins which pass through their hands, that is to say either to cut little fragments off the edge, or to wash them with chemical solutions which remove a little metal from the surface. These latter practices are in nearly all countries made criminal offences, but till the practice of manufacturing coins with milled edges was adopted in the seventeenth century, they were difficult to detect or prevent.

So long as there is a demand for an increasing supply of currency in circulation, these imperfections and malpractices do not affect the value of the monetary unit. The demand can only be satisfied by bringing gold to the Mint, and the Mint will only issue coin in exchange for the gold at the prescribed price. This is so even if the coin is imperfect. Eight hundred ounces of gold, eleven-twelfths fine, ought to be coined into 3,115 sovereigns. If they were in fact made into 3,116 sovereigns, the Mint would not for that reason give more than 3,115 for the 800 ounces.

But if for any reason there is no demand for gold bullion to be turned into coin, but on the contrary people want to turn coin into bullion, any deficiency in

the gold contents of the coin becomes a matter of consequence. The demand for gold bullion can be met by melting the coin, and it is of the essence of the gold standard that it should be so met. It is for that very purpose that the money is composed of gold at all. So long as the coin can be melted, the value of the monetary unit in gold is kept up, or in other words the price of gold is kept down. But if those who seek to procure gold find the coin imperfect, so that they get less gold than they anticipated, the price of gold will rise—the monetary unit will depreciate. All the coin will not be equally imperfect, and it will only be profitable in the first instance to melt the heavier coins. It will be easy to weigh each of the coins from any batch destined for melting, and to select those above a certain limit of weight, leaving the others to be passed on as coins. Nevertheless it will not be worth while to take this slight amount of trouble unless the price of gold is *already* above the coinage price. In other words the monetary unit must already have been depreciated below its value in gold prescribed by the gold standard.

This state of things used to occur constantly with the silver standards of the Middle Ages. It occurred with the English gold coinage prior to the recoinage of 1774, and it was on the point of occurring prior to the recoinage of 1891. It cannot be completely guarded against, but if coins are not allowed to be legal tender when below the prescribed weight by more than a certain small fraction, and if those which have been worn below this limit are regularly withdrawn from circulation at the public expense, the evil is reduced to a minimum.

The English Coinage Acts made sovereigns current so long as their weight was not below the proper amount by more than $\frac{5}{8}$ of 1 per cent. The actual deficiency of

weight in an average batch of sovereigns at any time between 1891 and 1914 was far less than this. Nevertheless there was always some deficiency except in the consignments of sovereigns direct from the Mint, which had never been in circulation. It was an interesting feature of the Gold Standard Act of 1925 that sovereigns became convertible at the Bank of England into gold bullion at parity on the same terms as currency notes, and it was therefore no longer necessary to melt them except when small quantities of gold were required.

In addition to all the unavoidable imperfections of coin, a charge for the cost of coining or even for the sake of Mint profits or seignorage was also sometimes made. In England under the régime of free coinage, which existed till 1925, there was no actual charge, but nevertheless anyone who brought gold to be coined suffered a small loss in respect of the interest on the value of the gold for the period of at least three weeks required for the process.

The price at which the Bank of England had to buy gold was fixed by statute at £3 17s. 9d. per standard ounce (eleven-twelfths fine). That was 1½d., or 1.6 per mille, less than the coinage price, and would be equivalent to interest at 3 per cent. for a period of about 20 days, or at 5 per cent. for 12 days. In practice people always preferred to sell their gold to the Bank rather than take it to the Mint. Even had it ordinarily been otherwise, any special pressure for coin would quickly have increased the period of delay before delivery of the coin, and the cost of interest would soon have exceeded the margin in the Bank of England's buying price. In fact, the limited capacity of mints and the consequent delay in the execution of large orders necessarily make the "free" coinage of gold a very

relative expression. If there were so urgent a need of currency that a few weeks' delay would destroy the utility of any source of supply, there might for a short time be a high premium on coin.

The essence of the gold standard is that the price of gold, the value of gold in monetary units, is fixed by law, and this determines the wealth-value of the monetary unit itself. The use of gold coin, notwithstanding its imperfections, provides a fairly close approximation to this ideal. Apart from some such restriction the wealth-value of the monetary unit would be free to vary indefinitely. Once the price of one commodity is fixed, this freedom ceases. The value of the monetary unit can only vary with that of the commodity to which it is tied.

Bank Reserves and a Central Bank

Let us assume for the moment that gold coin is the only currency of unlimited legal tender. The banks are bound to conform their operations to this condition. Their obligations have become obligations to pay gold. For payment of wages, for retail dealings and for many other transactions coin will be required. Even if small banknotes suitable for such payments are allowed to be issued, people may still prefer coin. Every bank must be prepared to pay out coin to those depositors who ask for it. It can only do so if it maintains a reserve of cash on hand sufficient to meet all probable demands.

And every bank has somehow to provide for meeting its liabilities to other banks. The daily clearing of cheques and banknotes will leave balances due from some banks to other banks. If no other arrangement

were made for paying these balances, they would have to be paid in coin, and a reserve of gold would have to be held for the purpose by every bank.

Now the maintenance of a cash reserve is dead loss to a bank. A great part of its profit is derived from its loans, advances, bills and investments, and the cash holding is maintained at the cost of a corresponding diminution of these earning assets. Clearing balances are subject to large and fortuitous fluctuations impossible to foresee, and if they had to be paid in currency, the reserves required would be large and burdensome. To escape the loss, the device of pooling the reserves has been evolved.

That means the creation of a Central Bank, with which the other banks can deposit their reserves. If they simply deposited their reserves for safe-keeping, and gained no other facilities, this might be a convenience, but would not enable them to diminish the amount of the reserves and the resulting loss. The advantage arises from the fact that a Central Bank is a *lender*. A bank which can borrow at need from the Central Bank can get on with smaller cash reserves; by borrowing it can draw upon the pool. That is the main purpose of pooling.

Suppose that a group of 100 banks in any community, with deposits aggregating £200 millions, having no Central Bank to resort to, maintains cash reserves of £40,000,000. On an average every bank has £2,000,000 of deposits and holds £400,000 of cash. That is because the payments it has to make in cash may at any time be of such a magnitude as to reduce any smaller reserve to inconveniently low limits. For example, if a bank sometimes has to meet balances of as much as £200,000 at the clearing, a reserve of £400,000 would then be

reduced by half by a single payment. But suppose that the banks can get accommodation from a Central Bank. For till money to meet their customers' demands for hand-to-hand currency 5 per cent. of the deposits or £10,000,000 would probably be quite enough. The rest of their reserves, amounting to £30,000,000, can be deposited with the Central Bank, and, in view of the possibility of borrowing, the total can be reduced substantially below that sum. A bank with deposits of £2,000,000, having to make an unforeseen payment of £200,000, can borrow that amount by way of an advance or the rediscount of bills from the Central Bank. The banks to which it makes the payment will very likely repay former advances made by the Central Bank. All those casual and temporary payments by one bank to another which appear at the clearing thus become practically book-keeping transactions at the Central Bank. A steady drain of debit balances against a particular bank is another matter. It is probably a sign that that bank is lending too freely to its customers. The peccant bank, unless it returns to more moderate courses, will find its indebtedness to the Central Bank growing, and its supply of securities suitable to be pledged or rediscounted with the Central Bank will eventually be exhausted.

The assets of the Central Bank will be composed partly of cash and partly of the advances and rediscounts made in favour of the other banks. Its liabilities will be the balances kept with it by the banks. We are assuming for the present that gold coin is the sole legal tender, and we will suppose that the Central Bank does not issue notes.

We assumed that the banks held £10,000,000 out of their £40,000,000 of reserves as till money, which must

be in coin. Suppose that, in view of the facilities they can obtain from the Central Bank, they can reduce the remainder of £30,000,000 by half. Their total reserves will then be £25,000,000 or one-eighth of their deposits, instead of one-fifth. The balances deposited with the Central Bank will be £15,000,000. But against these balances the Central Bank will not hold gold pound for pound. A portion will be covered by discounts and advances.

How is this portion to be determined? We have supposed coin to be the only medium of payment other than credit. Banks can pay one another by drawing on their balances at the Central Bank, but when their customers need more money for those purposes for which credit is unsuitable, they must supply coin. If there is a drain of coin from the banks into circulation, the immediate effect is to reduce their till money. But we have assumed their till money already to be at the lowest convenient figure, and they will make good the loss by taking coin from the Central Bank, and borrowing from it if necessary to maintain their balances. Suppose that the Central Bank keeps £10,000,000 of coin against £15,000,000 of deposits, the other £5,000,000 being covered by advances and discounts. Suppose further that £1,000,000 of coin is taken by the public into circulation, reducing the till money of the other banks to £9,000,000. They will restore their till money to £10,000,000 by taking £1,000,000 in coin from the Central Bank, and will keep up their balances with the Central Bank to £15,000,000 by borrowing £1,000,000 from it. The Central Bank will then hold only £9,000,000 of coin and £6,000,000 of advances and discounts against its £15,000,000 of deposits.

Control of Credit by the Central Bank

Thus the other banks look to the Central Bank as the sole source of legal tender currency. They keep their reserve balances there because it is prepared to assume this responsibility. But that puts an end to any ideal of an automatic currency. For the banks and the public do not trouble themselves about the interchangeability of gold and credit. That is the affair of the Central Bank alone. Anyone can sell the Central Bank as much gold as he likes and can procure from it as much gold as he chooses to pay for. The Central Bank is in the gold market as both buyer and seller in unlimited quantities at a fixed price.

But, it may be asked, is not this an impossible position? The dealers in any commodity can have only a limited stock on hand; when demand becomes too insistent, they defend their stock against depletion by raising the price. A Central Bank is not free to do this; it is bound to deal at a fixed price.

Now a fixed price means a fixed number of monetary units, and if the number may not move, the value of the monetary unit in commodities can. The mountain will not come to Mahomet, but Mahomet can go to the mountain.

We have already seen that the wealth-value of the monetary unit depends upon the action of the banks in creating credit. That action the Central Bank is in a position to control. For the one limitation on the creation of credit is the supply of cash, and the supply of cash is in the hands of the Central Bank. When more cash is needed, the banks procure it from the Central Bank by borrowing, and the Central Bank can charge what it pleases for its loans and discounts. If the banks

have been lending too freely, more currency will sooner or later be required for circulation. Those banks which have been most lavish in lending will be the first to increase their borrowing from the Central Bank to make good their cash. If the Central Bank raises the rate of interest or discount which it charges (commonly called "Bank rate") these imprudent banks will find that their additional lending is unprofitable, unless they charge as much in turn to their customers. A rise in Bank rate is quickly reflected in a rise in the market rates for loans and discounts, and thus deters traders from borrowing. The creation of credit is thereby damped down, and the wealth-value of the monetary unit is raised.

Similarly the Central Bank by lending freely can increase the cash reserves of the other banks and stimulate them in turn to lend, and the wealth-value of the monetary unit is then lowered.

The power of the Central Bank over the wealth-value of the monetary unit ultimately depends on the deterrent effect of a high Bank rate upon the borrowing operations of the customers of the banks. Bank rate is essentially a short-term rate of interest, and we are here concerned with short-term borrowing, whether by loans for a few days or months, by overdrafts or by the discount of bills. It is the borrowing of money *for the purchase of goods* that is likely to respond most promptly to a restriction or relaxation of credit, because a trader who wishes to reduce his indebtedness in respect of goods held in stock can readily do so by postponing or reducing his purchases. When traders are tending generally to do this, the effect is immediately felt by the *producers* of the goods in decreased orders. When the pressure is relaxed, and traders buy more freely, the orders to the producers increase, and productive activity is stimulated.

The installation of capital is usually financed by the raising of funds from the long-term investment market, but short-term borrowing is often resorted to in anticipation of the raising of funds from that source or for the purchase and holding of securities. If Bank rate is raised, the holding of capital assets with money temporarily borrowed is discouraged. But the effect on productive activity will be relatively slow, for the installation of capital is a prolonged process, and any such project is likely to be preceded by a long preliminary period of preparation.*

The raising or lowering of the wealth-value or purchasing power of the monetary unity by the regulation of credit is a much more roundabout process than the raising or lowering of price quotations in an ordinary market. If the banks have been lending too freely, and trade has become active, it is impossible for traders to cut down their borrowing at a moment's notice. Even though new orders may fall off immediately, they have entered into commitments extending some time into the future, and in many cases cannot proceed without borrowing in the interval before they deliver the goods and receive payment. And, on the other hand, if the banks have restricted their lending too far, traders will have been deterred by unprofitable markets, and it takes time to induce them to resume enterprise and take advances even on the most tempting terms.

The Demand for Currency

Confined to these indirect methods of influencing the market for gold, the Central Bank must adapt its stock-

* For a fuller treatment of this subject and the controversies arising out of it see my *Art of Central Banking* (pp. 150-74), *A Century of Bank Rate*, and *Capital and Employment*.

in-trade, the gold reserve, to the possible demands upon it. A dealer in any other commodity can raise the price he asks at a moment's notice to any level necessary to prevent the exhaustion of his stocks. The Central Bank must be prepared to suffer a heavy loss of gold in the interval after the initiation of a restriction of credit before the restriction becomes fully effective.

The demand for currency comes mainly from the wage-earning classes, and others whose financial transactions are too small for them to have banking accounts. It may be that these classes receive only half the national income or less, and they certainly possess only a very small fraction of the national resources. It is also true that their share of the total stock of the means of payment, taking currency and bank credit together, is small. But their share in the total stock of currency is large. All their cash is in the form of currency, while the people with banking accounts only retain a comparatively small sum as pocket money. Those with banking accounts are few, while the others are many, and the amount of pocket money which the former carry varies little between good times and bad. The cash resources of the working classes vary widely. In times of distress they are compelled to draw upon their reserves and in times of prosperity they reconstitute them slowly.

At a time of activity working-class earnings are at a maximum. That does not mean that their cash holding is at a maximum. Far from it, for it is their absorptive power that is at its height. A credit restriction may influence the outlook and intentions of traders immediately. Production will none the less continue for a time unchecked till existing commitments have been worked through, and the absorption of currency will continue, not merely till a check to production begins to be felt,

but till the consequent reduction of working-class earnings has proceeded so far that the dissipation of currency by those in distress outweighs the accumulation of currency by those who are still employed at good wages.

Therefore we see that, while it is true that business is sensitive to a restriction of credit, the demand for currency only responds very tardily.

Up to this point we have assumed that coin is the only currency, and that no other medium is available for wages and small retail payments. That means that if the cash reserves of the Central Bank are drained dry, no more currency will be available at all. In England from 1829, when one-pound notes were suppressed, till 1914 there were no banknotes under £5, and that was substantially the position.

But the exclusive use of coin is not essential to the gold standard. We have already mentioned the possibility of banknotes of small denomination. To the unrestricted issue of small notes by the banks there are objections, into which it is not necessary to enter here. But these objections do not apply to the issue of small notes by a Central Bank. Such notes need not be legal tender. The Federal Reserve notes in the United States were not legal tender till 1934. The notes of the Central Bank will be accepted in payment by everyone, whether they are legal tender or not.

The right of issuing small notes will enable the Central Bank to supplement the supply of currency without drawing on its gold reserves, and so to avoid the breakdown which the exhaustion of those reserves might otherwise threaten. So long as the notes are freely convertible into gold coin, the monetary unit is fixed in terms of gold and the gold standard is maintained.

The demand for gold coin as a medium of payment within the country can be fended off by the issue of small notes, but that does not dispose of the demand for gold *as a commodity*. We have already shown that the Central Bank is a dealer in gold at a fixed price, and that since it cannot raise the price it can only avoid selling gold too cheap by taking measures to raise the purchasing power or wealth-value of the monetary unit.

In what sense can gold be sold *too cheap*?

The demand for gold in industry might be stimulated if it were cheapened relatively to other commodities. But the industrial demand in any one country is likely to be too insignificant to trouble the Central Bank. The vital fact is that gold is a commodity with a world market, and therefore with a world price. It is this world price to which the Central Bank has to conform.

A world price is by no means a simple conception. A price is a value relative to a monetary unit. But there is no world monetary unit. A commodity with a world market has a different price in every country, reckoned in the country's own unit. A world price only exists because the different monetary units are related together by the foreign exchange market.

CHAPTER II

AN INTERNATIONAL GOLD STANDARD

The Foreign Exchange Market

THE foundation of the gold standard is the tying of the value of the monetary unit to the value of gold by the fixing of the price of gold. Inasmuch as gold is a commodity with a world market, it has a world value, and therefore the gold standard gives a world value to the monetary unit itself.

The world value of the monetary unit can only be made effective through the foreign exchange market, and our next task will be to elucidate the mysteries of that market.

The major payments of business are made with bank credit, and the banking system enables them to be cleared or set off against one another. The foreign exchange market is an organization by which payments to be made *in different monetary units* can be cleared against one another. The indispensable condition of that process is that the different monetary units should be valued in terms of one another. A pound is one thing and a dollar is another. But if £1 can be bought and sold for \$4.00, a debit of £10,000 can be set off against a credit of \$40,000.

International trade and other international transactions give rise to debts from people in one country to people in another. Each creditor wants ultimately to receive payment in the currency of his own country, but a debtor can in general pay only in that of *his* country. In the

course of his dealings a trader may both receive and pay foreign currencies, but in the end every country's products have to be paid for in its own currency, in terms of which costs are incurred.

Therefore in general anyone who becomes entitled to a sum of foreign currency will seek to sell it for the currency of his own country. His title may be embodied in a credit instrument. His debtor may have authorized him to draw a bill,* or may have sent him a cheque. Nowadays also frequent use is made of the telegraphic transfer, an order telegraphed to a bank to pay a specified sum to a person named. Whatever the instrument used, the right to receive money at a foreign centre is called "exchange" on that centre, or "foreign exchange."

It is the function of the dealers in the foreign exchange market to buy and sell exchange on foreign centres, and to make a price for every foreign currency unit dealt in. The dealers are for the most part banks. A bank dealing in foreign exchange will have a "correspondent" bank in any centre with which it deals, and the two banks will

* A bill of exchange is an instrument for assigning a debt to a new creditor; it takes the form of a written order to the debtor to pay the new creditor. The procedure may be compared to that of a tradesman who sends his customer an account, which is colloquially called a "bill." If goods are sold for payment on delivery, the purchaser regards the account which the man employed by the tradesman to bring the goods presents as practically a direction to pay the man. When an importer of goods arranges that the exporter shall draw a bill on him, it is a banker who presents the bill to the importer, and the bill orders him to pay the banker. Usually the debt embodied in the bill is payable after an agreed interval of credit, say, three months, but is recognized or "accepted" by the debtor on its first presentation. The bill may be drawn not on the importer himself but on his banker, or on an "accepting house" which specializes in that business. When the banker advances the money (less interest or "discount") to the drawer of the bill, he is said to discount the bill. When the bill is sold to someone else it is said to be "rediscounted."

A cheque is a particular kind of bill of exchange drawn on a banker and payable on demand. But as a cheque is paid as soon as it is presented it is not "accepted." There is no interval of time in which the holder has become a "creditor" in the eyes of the law.

maintain accounts with one another. When either bank in the course of its business receives exchange upon the centre where the other carries on business, it has the amount credited to its account, and when it is called upon to sell exchange on the centre it draws upon its account.

In the first place the banks do business for their own customers, buying foreign currencies from some and selling them to others. A bank is left day by day with a debit or credit balance in each foreign currency, which it endeavours to settle by buying or selling that currency in the open market. The various dealers are brought together by the market as buyers or sellers of any such currency, and thereby the credit balances of some are disposed of at the market price to meet the debit balances of others. But there will in general remain a residue, a net debit or credit balance, which cannot be so dealt with.

But at the same time dealers in the foreign exchange markets at other centres will have been dealing in the same currency and will have been left in the same way with debit or credit balances. The balances can be set off against one another, the credit balances being sold to the banks in the centres with debit balances. Thus the foreign exchange markets of the world form a single international organization, which clears all the international transactions in the currency of any one country.

Nevertheless in the end the debits and credits in a country's currency at all the centres of the world will not exactly balance; there will still be a residue. Suppose that the residue is an excess of the currency. That means that the banks will have been buying more of it than they have sold. Banks abroad will find their balances with correspondent banks in the country increased. The banks of the country will find their balances in foreign

currencies with correspondent banks abroad diminished. The country's banks, as it were, find their stock-in-trade of foreign currencies diminished, and foreign banks find their stock-in-trade of the country's currency increased.

It is the aim of a bank to keep its debits and credits in any foreign currency as nearly as may be equal. (That does not necessarily mean keeping its net balances in that currency at zero, for it may have *forward* dealings which it will want those balances to offset.) Any uncovered debit or credit balance of more than trifling amount assumes the character of a speculation.

The banks of the country will seek to make good their shortage of foreign currencies by offering a higher price for them in their own currency. The foreign banks will seek to get rid of their surplus of the country's currency by asking a lower price for it. The foreign exchange value of the country's currency unit will fall; the exchange becomes "unfavourable." Similarly if there has been an excess of sales of any currency by the banks, its foreign exchange value will rise; the exchange becomes favourable.

Rates of Exchange and Imports and Exports

In any market dealers regulate prices by the state of their stocks. A decline in their stocks means that demand is overtaking supply, and points to a rise in price; a growth of stocks means that supply is overtaking demand and points to a fall in price. This is true of the foreign exchange market; the dealers regulate the price of any currency by the state of their stock of it.

In a commodity market a rise of price checks demand and stimulates supply, while a fall of price checks supply and stimulates demand. In the foreign exchange

market, if the value of the currency of any country is raised, the effect is to make commodities at world prices cheaper to consumers in that country, and to stimulate imports; at the same time the cost of production of exportable products is increased in comparison with the cost of the same products abroad, and exports are checked. The increase in imports increases the demand for foreign currencies, while the decrease in exports decreases the supply. Likewise a reduction of the value of the country's currency in terms of foreign currencies would stimulate exports and check imports. In each case the alteration in the price of the currency tends to bring about a state of equilibrium.

Foreign Exchanges and the Gold Standard

Now as between any two countries which both use the gold standard this procedure will not work. For it presupposes that the price of the currency of either in relation to that of the other can vary indefinitely. If both currencies are fixed in gold, and there is no interference with the free export and import of gold, this is not so.

In virtue of the operations of dealers in the bullion market, the prices in any one currency of gold in different places cannot differ by more than the cost of transporting gold between the two places. This cost is usually a very small fraction of the value of the gold. Between London and New York it is about 0.5 per cent. Even between the most distant centres it does not much exceed 1 per cent.

But in a country with a gold standard the value of gold is the value of the monetary unit. The price of the currency of one gold standard country in terms of that of another is the value of gold in the former in terms of the value of gold in the latter, and can only vary from

parity by a fraction representing the cost of transporting the gold from one country to the other.* By "parity" we mean a price expressing exactly the relative quantities of gold in the two units. When a pound was the price of $113\frac{1}{23}$ grains of fine gold, and a dollar was the price of 23.22 grains, the parity was the ratio of these two quantities of gold, or $\$4.86\frac{21}{32}$ to £1. The rate of exchange at which it just becomes worth while to send gold to another country is called the gold export point, and the rate at which it just becomes worth while to bring gold from the other country is called the gold import point.

It follows that the dealers in foreign exchange, when they are short of the currency of another gold standard country, cannot raise the price of that currency to any appreciable extent. The fractional rise which will suffice to start movements of gold thither will not be great enough to have any considerable effect on its exports or imports of goods. The scarcity of the currency in question cannot be corrected by that stimulation of imports into the country and discouragement of exports from it which any considerable rise in the exchange value of the currency would have accomplished. The excess of exports and deficiency of imports continue, but equilibrium is nevertheless restored by imports of gold, which make up the balance.

Foreign Exchanges and Gold Reserves

When a gold standard country finds one of its neighbours absorbing gold in this way, the gold which it is compelled to export has to come from the reserves of the Central Bank. And now we can see the practical

* Together with any difference between the buying price and selling price of the Central Bank or monetary authority for gold.

significance of the Central Bank's defence of its gold by regulating the value of the monetary unit in terms of wealth. In a world in which the gold standard predominates, the market for gold is simply the market for gold standard currencies. It is coincident with that section of the foreign exchange market which deals in gold standard currencies.

The Central Bank's task is to keep the value of the monetary unit in the foreign exchange market as near as possible to par with other gold standard currencies. Any considerable failure in accomplishing this purpose will involve it in a gain or loss of gold which is liable to be both larger and more sudden than any movement to or from internal circulation. In settling the amount of the gold reserve these international movements must be the main consideration.

Obviously a loss of gold is a much more serious matter than a gain. If the Central Bank receives an abnormal amount of gold, it suffers a diminution of profits and possibly a loss of control over the market in discounts and short loans. But the loss of control, leaving the community free to borrow and lend, will tend to cheapen the currency and to restore equilibrium, and the restoration of equilibrium will itself enable the Central Bank to get rid of the superfluous gold.

On the other hand a loss of gold may exhaust the reserve altogether and incapacitate the Central Bank from discharging its duty of selling gold at a fixed price. That means an actual lapse from the gold standard, and a reversion to the system of maintaining equilibrium in the foreign exchange market by letting the rates of exchange vary.

Therefore it is essential to the gold standard to guard against the exhaustion of the reserve. The reserve ought

normally to be great enough to meet all the demands for gold likely to arise in the interval between the initiation of a contraction of credit and its final taking effect in the restoration of the exchange. The extent of these demands for gold will depend partly on the discrepancy between exports and imports that has to be met, and partly on the length of the interval. The length of the interval will depend upon the sensitiveness of the credit system to the measures taken.

The use of the gold standard gives a new significance to the conception of the foreign exchange market as an organization for the clearing of debts. Without the gold standard the clearing process is incomplete. As we saw, there is continually a residual balance due to or from any country which cannot immediately be cleared, in the sense of being cancelled against a contrary balance. The market can only deal with the residual balance by so adjusting its quotations for the currency in question that the balance will be absorbed by a suitable modification of exports and imports. But with a gold standard different currencies become approximately commensurable with one another. The residual balance can be paid in gold. If at any time there is a residual balance due from one gold standard country to another, a quantity of gold can be taken from the former and transported to the latter. The same gold is equivalent to the debtor's currency in the debtor's country and to the creditor's currency in the creditor's country. Thus a clearing balance due from one country to the other can be paid in the international currency, gold.

Gold Movements and Creation of Credit

These international movements of gold furnish an

instructive analogy to the payment of clearing balances between banks within the limits of one country. In any clearing system a bank which lets its lending outstrip its deposits begins to lose balances at the clearing. In the same way in an international system the country which creates credit too freely loses gold. Its banks create credit by lending to their customers, and thereby put at the customers' disposal additional means of payment. So long as the money unit is fixed in value, the people who acquire the means of payment are enabled to draw upon the supplies of goods in world markets in competition with purchasers in other countries. The additional supplies of goods have to be paid for, and hence the exports of gold.

This does not mean simply that if £10,000,000 be added to the total of bank deposits, £10,000,000 will thereupon be exported in gold in exchange for foreign goods. The process is much more complicated, and we have already had something to say about it in the first chapter. The total of bank deposits we then (pp. 13-14) compared to a reservoir, into which is being poured the daily amount lent by the banks, and out of which flows daily the amount repaid to the banks. If the stream of lending is increased, the additional money lent is quickly used by the borrowers in the acquisition of goods, and becomes the income of those who take part in producing the goods. This increase in income is felt in an increase in demand for goods in general. A part of the new demand will be applied in purely internal markets, and will enable the sellers of goods in those markets to increase their repayments to their bankers. But a part will be applied to buying imported goods and goods which might have been exported. This part will have to be exported in gold. Finally a part of the

additional income received by people engaged in production will not be spent at all, but will be retained by them in balances. This part represents the increase in bank deposits and currency in circulation (the unspent margin).

The process can be made clearer by illustrative figures. Take a country with a consumer's income of £10,000,000 a week or £520 millions a year, in which the banks lend £5,000,000 a week and an equal weekly amount is repaid.

Now suppose that the weekly amount lent by the banks is increased from £5,000,000 to £6,000,000. The money borrowed will be used for the purchase of goods. It may be applied in the first instance in payments by one merchant to another, but directly or indirectly it will go to producers, swelling the total of profits and wages by approximately £1,000,000 a week, and becoming the source of additional demand.

If the increase in lending occurs at a time when industry is not employed up to capacity, these additional wages and profits will be partly or even wholly represented by additional production. But production takes time, and, in the interval before the new output comes on the market, the additional demand will be felt in sales of finished goods from stock.

The merchants and dealers who sell these goods will seek to replenish their stocks. Those who deal in home-produced goods will do so partly by ordering fresh supplies from the producers, and partly by diverting to the home market goods which might have been sold abroad. Those who deal in foreign-produced goods will order fresh supplies from abroad.

The consumers' income has been increased by £1,000,000 a week. It is probable that the recipients

of this additional income will not immediately spend every penny of it. If they retain £200,000 in their cash balances, then of the remaining £800,000 we may assume £600,000 to be spent on home-produced goods, and £200,000 on imported goods. And of the £600,000 spent on home-produced goods perhaps £100,000 might be on goods which would otherwise have been exported.

The acquisition of additional imports to the value of £200,000, combined with a shortage of £100,000 in exports, creates an external liability or "adverse balance" of £300,000, which (except in so far as the banks and other dealers in the exchange market may have superfluous foreign balances available) will have to be paid in gold.

Of the £1,000,000 borrowed, the net amount returned to the traders for sales of goods is only £500,000. The rest is accounted for by £200,000 added to consumers' balances and £300,000 paid for imports. The proceeds of sale may be applied to repayment of bank advances, or a part may be used to strengthen the traders' balances.

If we suppose the consumers' income to remain at its increased figure of £11,000,000 a week, the cash absorbed by consumers and traders will eventually raise the balances of both to the amount appropriate to their transactions. The further accumulation of cash will then cease, but the adverse international balance will remain, and indeed, when the whole of the £1,000,000 of additional income is being spent, it will be greater than at the outset.

In practice there is likely to be a *progressive* increase of the consumers' income. When the additional spending first begins, traders will seek not merely to replenish their stocks but to *increase* them in proportion to the expansion of their sales; they will give orders to the

producers in excess of their sales, and the producers will be led to borrow more. The vicious circle of expansion will be joined, and the consumers' income, instead of remaining constant at its increased amount, will go on increasing. Even when industry is employed up to capacity, the increase of the consumers' income will not stop, but it will take the form of a rise of prices. Wholesale prices rise because producers are receiving more orders than they can execute; retail prices rise because traders' stocks are depleted and cannot be replenished without delay.

But the prices of goods which compete in international markets cannot be freely raised. These, which may conveniently be called "foreign trade products," comprise not only actual imports and exports but all importable and exportable goods. The prices of foreign trade products are governed by prices in world markets, and are fixed in gold.* The demand for them will expand as the consumers' income expands, and as the demand expands the loss of gold grows greater and greater.

Similarly if we assume the weekly amount lent by the banks to traders to be reduced from £5,000,000 to £4,000,000, the consumers' income is reduced by £1,000,000 a week and the demand for foreign trade products will fall off. Traders' stocks will become redundant, a vicious circle of contraction will be joined, and there will be a deficiency of imports to be made good by growing imports of gold.

It should not be forgotten that the consumers' outlay includes not only expenditure on consumption but also savings invested, or placed in income-yielding securities

* Competition in world markets, however, does not prevent moderate differences in price between goods produced in different countries which are sure to present differences in type, quality, etc.

or enterprises. We are assuming the sums invested to be applied through the medium of the investment market to capital outlay. As the consumers' income expands or contracts, savings expand or contract. Along with the importation of goods we have to take account of the importation of securities, or more accurately external investment (which is not always represented by "securities"). When savings expand, unless the attractiveness of openings for investment at home keeps pace, there may result increased investment abroad. That is an "invisible import" having the same effect as a "visible import" of goods. It is a paradox of the economist's vocabulary that external investment, which is an invisible import, is called an "export" of capital.

We have seen above (pp. 24-6) how the responsibility of so regulating credit as to counteract these expansions and contractions devolves on the Central Bank. The instrument principally relied on for that purpose is the Bank rate, by which short-term rates of interest are governed.

A high Bank rate or "dear money" corrects an unfavourable exchange position, because it deters traders from buying goods with borrowed money, and so brings about a shrinkage in demand and in the consumers' income. Incidentally it has another effect, which may for a time reinforce its favourable influence on the exchanges. It attracts foreign money for temporary investment.

The reinforcement, however, is transitory and precarious. It lasts only so long as the foreign money is actually being transferred, and it makes way for an adverse effect as soon as the foreign money begins to be withdrawn. Moreover a difference in the short-term rates of interest at two centres cannot be counted on to last for more than a few months, at most, and the gain from an apparently considerable difference is very small

—so small as to be offset by a very moderate risk of loss by exchange. The contraction of the consumers' income is the only substantial corrective.

An International Credit Expansion or Contraction

Thus, with a gold standard, either an expansion or a contraction of credit must be checked before it proceeds beyond a certain limit, or the loss or gain of gold will become excessive. But that is only so on the assumption that an expansion or contraction of credit does not occur in other gold standard countries. If there were a general and simultaneous expansion of credit in all other gold standard countries, then a country which did not participate in the movement, but kept credit steady, would receive gold from them, just as if it had instituted a contraction of credit on its own account. Similarly if there were a general and simultaneous contraction of credit, the country which kept credit steady would lose gold as if it had had an expansion. The gold standard requires all countries that adhere to it to keep pace in their credit movements but, so long as they do so, it does not *prevent* such movements.

A general credit expansion would eventually involve an increase in the circulation of currency in all the countries which experience it. If the currency takes the form either of gold coin or of paper money backed by gold, this increase in circulation will mean a demand for gold. But whereas a country which fails to keep pace with the credit expansions and contractions of its neighbours almost immediately suffers the consequences in an importation or exportation of gold, the increase in the circulation of currency in any one country, and therefore equally in all countries taken together, takes place very

tardily. Moreover this demand for currency can be met by the issue of paper money, and if the issue of paper money is limited by some relation to the gold reserve, that limitation is an arbitrary one imposed by law or administrative practice, and can, if need be, be suspended or relaxed.

Consequently the increased demand for currency fails to check an international credit expansion at an early stage. Under the conditions of the nineteenth century the expansion would always be allowed to go too far; it had eventually not merely to be checked but to be reversed. There resulted an international credit contraction, in which all gold standard countries had to keep pace. The tribulation inflicted upon them by deflation is a topic to which we shall return presently (below, pp. 56-7, 88-9, 122-3 and 185-6).

Purchasing Power Parity and the Wage Level

When we say that a country keeps pace with the rest, we mean that its rates of exchange on them are such that its exports and imports (visible and invisible) are equal, so that there is no balance either way to be met by a movement of gold. How must the rates of exchange be determined to fulfil that condition? The answer sometimes given is that the purchasing power of its currency unit must be the same at home and abroad, or in other words that the values of currency units in the foreign exchange market must be inversely proportional to the price levels in the respective countries.

That is the doctrine of purchasing power parity. To put it crudely, if the rate of exchange between the currency units of any two countries conforms to it, the two countries have the same price level in terms of either unit.

So stated, the theory will not stand criticism. So far as regards foreign trade products which are suitable for exportation from one country to the other, they will be at competitive prices. The price of any such product in either country will not differ from its price in the other at the existing rate of exchange by more than the cost of transporting it from one to the other (including any import duties). The price levels of these products in the two countries will not differ materially (apart from the disparities caused by import duties) even if the balance of payments is *not* in equilibrium.

On the other hand the prices of home trade products (those not suitable for foreign trade) may differ considerably. They are only indirectly linked together in that the home trade products of any country compete with its foreign trade products for the available labour supply, and that they compete in appealing to the same set of consumers.

Real monetary equilibrium in any single country requires the price level to be in harmony with the wage level, so that the margin of profit is sufficient, but not more than sufficient, to induce full activity and full employment. Equilibrium in the foreign exchanges requires the rates of exchange to correspond to these price levels. Thus the governing factor is ultimately the wage level.

That does not mean that wage levels in different countries reckoned in terms of one another's currency units must be identical. If that were so, the countries endowed with great natural advantages or favoured with especially efficient capital equipment or business organization would do all the exporting. To secure international equilibrium, the wage level of any country must be high enough to offset competitive advantages of this

kind. Moreover any country which has a system of protective import duties, or impedes imports by any other means, must have a high enough wage level (in terms of the currency unit) to keep down its exports to the equivalent of its imports (visible and invisible).

It must not be inferred that, whenever rates of exchange depart from this equilibrium, a movement of gold must necessarily occur. The dealers in foreign exchange will acquiesce in small changes in balances, and, what may be more important, speculators will sometimes intervene and buy and hold balances of a currency which they expect to rise.* If a difference between a country's exports and imports is offset by speculators' operations, there is no immediate failure of equilibrium. Disparities known to be temporary, such as those of a seasonal character, may be smoothed out by the operations of traders or even of banks. And sometimes, when there is a widespread belief that a currency is overvalued in the foreign exchange market and that its value is almost certain to be reduced, a speculative movement against the currency is started on an enormous scale, far transcending any possible balance of exports, and the speculators' purchases of foreign currencies have to be offset by an export of gold. If the gold is not forthcoming the gold standard cannot be maintained, and the anticipated depreciation becomes an accomplished fact.

* A speculator usually resorts to a "forward" transaction, a bargain by which he undertakes to buy (or sell) a sum in foreign currency at an agreed future date. Till the future date arrives he neither pays nor receives anything. Nevertheless speculation does affect the market immediately, because the bank with which he does business is not willing to speculate, or to have an "open position," as it is called, and forthwith buys (or sells) as much of the foreign currency as it binds itself to sell (or buy) in the future. Any excess of speculative buying over selling (or vice versa) is thus immediately felt by the market.

The World's Gold Supply and the Demand

We may regard the Central Bank or other authority controlling the gold reserves and currency in each gold standard country as one of the dealers in the world market for gold. Together they form a body of dealers undertaking to buy and sell gold in unlimited quantities at fixed prices. Their gold reserves form their stock-in-trade.

The output of gold has expanded to an enormous extent in the past hundred years. The expansion has proceeded spasmodically. Largely as a result of the opening up of the Siberian mines the world output rose from an average of under £2,000,000 in the years 1821-30 to £7,500,000 in the years 1841-50. But this was soon eclipsed by the Californian and Australian discoveries in 1849 and 1851, which raised the output in 1853 to £31,000,000. That remained the maximum recorded till the combined effect of the South African discoveries and the adoption of the cyanide process began to be felt in 1890. In 1915 was reached a new maximum of £96,000,000 (22,600,000 ounces). There followed a decline, but in 1932 this figure was surpassed and in 1941 the output reached 40,000,000 ounces.

Throughout this period the output has been far in excess of the industrial consumption, that is to say, the consumption for all purposes other than currency. At times large amounts have been absorbed into hoards in India, China and other Oriental countries. The Indian peasants have long been accustomed to hoard a considerable portion of their surplus wealth in the form of gold ornaments, and the demand for this purpose has been very fluctuating, depending as it does on the surplus

resources of an agricultural population whose prosperity varies much from year to year. The remarkable change that occurred in the nineteen-thirties, when India not only ceased to absorb gold for hoarding but actually released large amounts previously hoarded, is referred to below (p. 154). But even when the Oriental hoards were being actively accumulated, they and the industrial demand were not sufficient to use up the new output; there was always a portion left over for use as money, so that the world's stock of monetary gold was perpetually growing. In 1925, when Great Britain returned to the gold standard after the war, that stock had reached something like 500 million ounces (£2,100 millions).

This gold was in the hands of the Central Banks and Treasuries. The monetary authorities were dealers in gold, and this was their stock-in-trade. It exceeded twenty-five years' supply! For generations the monetary authorities had been buying up all the superfluous gold off the market, and this was the result.

The gold standard stabilized the value of the currency unit by fixing the price of one commodity. But the wealth-value of that commodity was not the resultant of the free reactions of supply and demand. Its value was in the hands of the currency authorities themselves, who were equally well equipped both to dominate the demand by buying unlimited quantities and adding to their hoards, and to dominate the supply by letting loose a small fraction of those hoards.

The wealth-value or purchasing power of gold was determined mainly by the demand for it for monetary purposes. The industrial demand took quite a secondary and subordinate place.

Gold Reserves

The next question we have to consider is how the currency authorities used the power which they possessed over the gold market. That brings us back to the question we have already referred to, of the amount of the gold reserve.

A gold reserve is held with a view to contingencies, particularly to what we may call an adverse clearing balance against the country in world markets, or, in the more usual phrase, an adverse balance of payments. It is impossible to calculate beforehand the magnitude of these contingencies, and the conclusions arrived at on the subject have everywhere been empirical. They have been picked up from experience with little assistance from theory.

It is natural to think in terms of percentages. The reserve must be in some sense proportional to the transactions out of which adverse balances may arise. Any bank usually aims at a certain proportion of cash reserves to liabilities, to cover both clearing balances and withdrawals of money into circulation. Proportions between 10 and 15 per cent. are very commonly adopted by banks which have rediscounting facilities open to them.

A Central Bank of issue, having no rediscounting facilities available, would naturally keep a higher proportion. Accordingly gold reserve laws have commonly been enacted requiring the gold held to be not less than, say, 30 per cent. or 40 per cent., or one-third of the note issue. The law does not necessarily prescribe a proportion. Another method is to require the whole of the note issue in excess of a certain fixed amount to be covered by an equal amount of gold. But whatever the principle embodied in the law may be, people will

criticize it or recommend it from the point of view of the proportion of gold to liabilities which is found to emerge.

The liabilities on which this proportion is taken are those of the Central Bank. Very often only its note issue is taken into account. The deposits, in so far as they are the balances held by other banks, are mainly clearing reserves. The notes represent mainly the requirements of the public for currency. Provided no change is made in the practice of paying clearing balances with cheques on the Central Bank, the deposits will not be turned into notes, nor notes into deposits, except in so far as these requirements are subject to fluctuations.

The justification for basing the gold reserve on the liabilities of the Central Bank is that it is only through those liabilities that gold can be drawn from the reserve. In the numerical example which we used in Chapter I (p. 21) we supposed that £200 millions of banking deposits were supported by reserves of £10,000,000 in cash and £15,000,000 in deposits at the Central Bank. We may now modify our hypothesis by assuming that only paper money is used, to the exclusion of gold coin, and that the total note issue is £40,000,000, of which the banks hold £10,000,000, and the balance of £30,000,000 is in circulation. The liabilities of the Central Bank will then amount to £55,000,000, made up of £40,000,000 of notes and £15,000,000 of deposits.

If the Central Bank were required by law to maintain a gold reserve equal to two-fifths of its note issue, this minimum reserve would be £16,000,000. But in practice it would have to hold substantially more. For if it held only £16,000,000, and any sum in notes, however small, were presented to withdraw gold for export, the reserve would immediately be reduced below the minimum. If notes to the value of £1,000,000 were presented, a

reserve of £15,000,000 would remain against a note issue of £39,000,000, whereas the reserve ought to be two-fifths of £39,000,000, or £15,600,000.

If the principle of a fixed fiduciary issue were adopted, if, for example, a fixed amount of £24,000,000 were allowed to be covered by securities, and all notes issued in excess of that amount had to be covered by an equal amount of gold, then the note issue of £40,000,000 would be covered by £24,000,000 of securities and £16,000,000 of gold. If £1,000,000 of notes were presented for gold for export, the reserve law would be untouched, for a note issue of £39,000,000 would be covered by £15,000,000 of gold and £24,000,000 of securities. This would equally be so if £10,000,000 were presented, for then a note issue of £30,000,000 would be covered by £6,000,000 of gold and £24,000,000 of securities.

But even this system does not exempt the Central Bank from keeping a surplus gold reserve. For besides withdrawals of gold for export it has to meet withdrawals of notes into circulation. If the public need £30,000,000 in notes, then the £10,000,000 of notes presented for gold will have to be replaced. In fact, they will be replaced among the public by notes drawn out of the banks, whose reserves will be thereby reduced from £25,000,000 to £15,000,000. That will be insufficient to provide for their till money and clearing balances, and they will proceed to make good the shortage in the only way open to them, that is to say by borrowing from the Central Bank.

The Central Bank can, if it pleases, refuse absolutely to lend, or can ration credit so as to keep its lending within a prescribed limit. If it did so refuse, it could keep within the legal limit of its note issue despite the

withdrawals of gold. But long and varied experience of financial crises has shown that it is very undesirable that the Central Bank should absolutely refuse to lend. That way lies panic.

We have supposed a sudden and severe shortage of cash to occur, the total notes in circulation among the public and the banks being reduced from £40,000,000 to £30,000,000. The effect will be an extreme unwillingness of the ordinary banks to lend, for any bank which lends more freely than the others will have to pay an adverse balance at the clearing, and when their cash holdings are reduced so low, they cannot afford to do so. Borrowers must therefore fall back on the Central Bank. If it will not lend, they cannot get money from anywhere. The least of the harmful results will be the slowing down or stoppage of many businesses for want of working capital. Others, with liabilities to meet, will have recourse to forced sales of goods or securities. Markets will be overwhelmed and purchasers will be few. The difficulty of selling and the consequent precipitate fall of prices will send traders with intrinsically sound businesses into bankruptcy.

These disastrous developments can be avoided if the Central Bank will continue to lend. It may insist on good security and may charge a very high rate for its loans. Even a very high rate for a short period is but a slight burden on a prosperous trader in an emergency, and it deters people from borrowing in circumstances where borrowing is not really necessary.

If the Central Bank is to adopt this policy of never refusing to lend to sound borrowers, it must be prepared to make good any shortage in the note circulation by lending. Should it do so at a time when the circulation is already up to the legal limit, then the legal limit will

be exceeded. Therefore a necessary consequence of this policy is that the Central Bank should keep a margin of its power of note issue in reserve. Or in other words it must keep a gold reserve exceeding by a suitable margin the amount prescribed by law.

In our numerical example the Central Bank, with £40,000,000 of notes issued and deposits of £15,000,000, is legally bound to keep £16,000,000 against the notes, and must therefore keep a further sum to meet export demands if it is to do so without either breaking the law or cutting down the supply of money in circulation. This is the function that was discharged by the reserve in the Banking Department of the Bank of England under pre-war conditions, before the position was modified by the Currency and Bank Notes Act of 1914. That reserve was the margin between the actual note circulation and the circulation legally permissible. It was, as a matter of practice, kept at about 40 per cent. of the deposit liability, except at the time of big seasonal increases in deposits. The gold reserve in excess of this margin could not be touched except at the cost either of reducing the circulation or of breaking the law. Reducing the circulation meant in the last resort refusing to lend, and when confronted with the alternatives, the Bank, reinforced by the authority of the Government, chose to break the law.*

Under the Currency and Bank Notes Act of 1914, which was an emergency measure, the Treasury was given the power to authorize the Bank to exceed the limit, and the further Act of 1928, which transferred from the Treasury to the Bank the issue of legal tender notes of denominations below £5, instituted a normal

* It should be mentioned that in practice the Bank of England does not lend direct to the Joint Stock Banks, but to the discount houses from which the banks can call up money.

fiduciary issue of £260 millions, which could be varied upwards or downwards by the Treasury at the request of the Bank (an increase, however, might not last beyond two years without further Parliamentary authority). This normal fiduciary limit was altered to £300 millions by the Currency and Bank Notes Act, 1939. Under war conditions the entire gold holding of the Bank was transferred to the Exchange Equalization Account. The whole note issue became the fiduciary issue, and the limit was raised from time to time till it reached £1,400 millions.

The virtue of the fixed fiduciary issue lies in tying up a part of the gold reserves out of reach in the statutory backing of the note issue, so that the Bank's day-to-day operations will be conducted on the basis of its free reserve only. In an emergency the hidden gold is made available by suspending the fiduciary limit. If the fiduciary limit were not respected in quiet times, the hidden gold would not be there in an emergency.

In France there used to be a maximum limit to the note issue, which was regularly raised by amending legislation if circumstances required, but there was no prescribed gold reserve. Nevertheless the Bank of France maintained a very large gold reserve, covering a high proportion of the note issue (68 per cent. in 1914).

In fact, up to 1914 the prevalent policy everywhere was to keep large gold reserves, and it was this demand for monetary purposes that dominated the gold market.

The accumulation of these huge gold reserves was the result of caution and even timidity. The authorities, political and financial, that framed monetary policy never had any clear idea of the causes of gold movements or of the manner in which the remedies worked. They therefore never felt sure that any gold reserve, however

great, would be adequate. In those days gold coin formed the principal hand-to-hand currency in Great Britain, France and some other countries. The gold reserve might have to sustain either an internal drain, to meet a demand for currency, or an external drain, to meet an adverse international balance. An internal drain, arising simply from growing activity of business, and not complicated by any loss of confidence, is so gradual that it can be checked in time without difficulty. But an external drain due to an adverse international balance may be a more serious matter.

We have seen how an expansion of credit and a consequent enlargement of the consumers' income may give rise to an adverse international balance. In the illustration employed above (p. 39) we assumed an enlargement of the consumers' income by 10 per cent., and an adverse balance equal to 30 per cent. of the increase or 3 per cent. of the consumers' income. If no other source of disturbance is present than the increase in the consumers' income, we may suppose the internal drain to be satisfied by an expansion of the currency in the same proportion, 10 per cent. But the external drain is subject to no such limit. So long as the consumers' income remains at its enlarged amount, and the consumers' income in other countries remains unchanged, the external drain will go on undiminished. Positive measures must therefore be taken to compress the consumers' income. But that will take time. Suppose that it takes three months, and that the average adverse balance during that time is 300,000 units. The total loss of gold is then 3,900,000 units or 0.75 per cent. of a year's income. The gold reserve ought to be such as to bear that loss without being unduly depleted.

These calculations are imaginary, but not in them-

selves improbable. The gold reserve might be fixed normally at, say, 15,600,000 units or 3 per cent. of a year's income. If the consumers' income were enlarged relatively to that of foreign countries by *more* than 10 per cent., or if the resulting excess of imports were *more* than 30 per cent. of the additional income, or if it took *more* than three months to effect the necessary contraction, the drain would be greater, and there might even be a danger of the exhaustion of the gold reserve. In that case there might arise a distrust of the currency, and the loss of gold would be accelerated by speculators' purchases of foreign currencies and possibly by an increased internal drain for hoarding purposes.

The internal drain can be dealt with by an issue of paper currency, authorized, if need be, by emergency legislation. But the external drain may in the last resort involve a suspension of the gold standard.

Apart from the special case of inflationary government borrowing in time of war, an external drain due to an excessive credit expansion in a country is not likely to be difficult to deal with. Such a movement responds easily to restrictive measures, and the external drain of gold, beginning as it does at the outset of the movement, gives early warning of the need for restriction. It is when the external drain is due to restrictive measures *in other countries*, and a consequent rise in the wealth-value of gold, that the strain becomes formidable.

The strain of compressing the consumers' income to adjust the monetary unit to a big rise in the wealth-value of gold may become so severe that the attempt has to be abandoned, and the gold standard suspended, even though the gold reserve remains ample. It is no use accumulating gold to meet a strain which in any case the community will not stand. A gold reserve in excess

of what is required to carry the community through the greatest deflation that will be found bearable is redundant.

Besides inflationary and deflationary movements at home and abroad, gold movements may also be occasioned by causes directly affecting the balance of payments, fluctuations in exports or imports or in external investment.

If, for example, a country suffers a shrinkage of production and a shortage of exports through a failure of crops or an industrial dispute, the effect will be felt in the diminished incomes of the producers. They will have less to spend and will buy less imported goods and invest less money abroad.

The disturbance in the balance of payments to be made good is only the *difference* between the shrinkage of exports on the one hand and the curtailment of expenditure on foreign trade products and external investment on the other. The difference is not likely to put any very serious pressure upon the monetary system except where the prosperity of a country is based almost entirely on exports of some one staple product.

The Gold Bullion Standard

Though it is true that in an emergency an internal drain of gold can be satisfied by an issue of paper currency, it is not possible at a time of panic to get back any considerable amount of the gold coin which is already in circulation. People who fear that the paper currency will depreciate hoard the gold.

The use of gold coin in circulation is sometimes recommended as providing a second-line reserve in support of the foreign exchange. But this second-line

reserve cannot easily be collected in an emergency, and is far less effective than the same amount of gold collected in a central reserve and permanently replaced in circulation by paper money.

To secure a concentration of all the available gold in the reserve, recourse has been had to what is now known as a gold bullion standard.

The gold bullion standard was the invention of Ricardo, who in his *Proposals for an Economical and Secure Currency* suggested that the use of gold coin could be dispensed with by making Bank of England notes convertible into gold bars of not less than twenty ounces instead of into gold coin. The plan was actually adopted as an interim arrangement by the Act of 1819 for the Resumption of Cash Payments, but did not become operative, as the Bank was a buyer and not a seller of gold in the short interval till specie payments were fully restored in 1821.

The idea of a gold bullion standard was revived by the Cunliffe Committee, which tentatively recommended it in 1918, with a view to concentrating the available gold in the Bank of England's reserve, and it was actually adopted by Great Britain and some other countries on returning to the gold standard in 1925 and subsequent years. The Gold Standard Act of 1925 suspended both the free coinage of gold and the convertibility of the paper currency into gold coin, and obliged the Bank of England to sell gold bullion to all comers at the old coinage price of £3 17s. 10½d. a standard ounce (£4 4s. 11½d. a fine ounce) in amounts of approximately 400 fine ounces at a time. The Bank was already obliged by the Act of 1844 to buy gold at £3 17s. 9d. a standard ounce. The free convertibility of gold into credit and of credit into gold was thus

secured, and the demand for gold for internal circulation was adequately prevented.

On the assumption that an internal drain of gold was no longer possible, the Macmillan Committee recommended that the system of a fixed fiduciary issue, which links the amount of gold reserve required with the note issue, should be abandoned. But as "it is not unreasonable to regard some part of a country's gold reserve . . . as an ultimate reserve not to be brought into consideration in ordinary cases, but kept as a last resort for use only on grave national occasions," they proposed that the Bank "should by law not be permitted to allow its gold reserve to fall below (say) £75,000,000, except temporarily by permission of the Treasury." (Report, Cmd. 3897, pp. 138-43.) If that proposal were carried into effect, the "reserve" of the Bank for the purposes of its daily transactions would be the excess of its gold holding over the statutory minimum. That the reserve would not be affected by casual or seasonal variations of the note issue would be an advantage.

After the breakdown of the gold standard in 1931 there was an insistent demand in Continental countries for gold for hoarding purposes. People who feared that the currency of their own country would depreciate sought to place their liquid resources in some other medium. If they did not trust any foreign currency, they might have recourse to gold. A gold bullion standard is not proof against such demands. Hoarders on a large scale could purchase 400-ounce bars and deposit them in banks for safe-keeping. And bullion dealers would divide up the large bars into small bars to meet the needs of hoarders on a small scale. Gold coin also was obtainable on payment of a moderate premium over the market value of its gold content.

The Bank for International Settlements estimated the gold hoarded in Europe in 1936 at from 1,500 to 2,000 millions of dollars (at \$35 to a fine ounce) or about 50 millions of ounces.

The Gold Exchange Standard

The classic form of gold standard, based on the free coinage and active circulation of gold coin or specie, we may call the *Gold Specie Standard*. Besides that and the *Gold Bullion Standard* we may distinguish yet a third variety, the *Gold Exchange Standard*. The gold exchange standard is a practical device for economizing the use of gold in the application of the gold standard. It may be compared to the adoption of the payment of balances between banks at the clearing house by cheque instead of with currency.

The gold standard involves the use of gold in international monetary affairs as a medium of exchange, but as a medium of exchange not between different *commodities* (except indirectly), but between different *currencies*. When gold was sent from London to New York, the bullion market changed pounds into gold and then changed the gold into dollars. The gold was used as a *medium* for changing pounds into dollars. Now, as has already been pointed out, when gold is used merely as a medium of exchange and not as a material of industry, the right to receive gold will serve just as well as gold itself.

When Russia succeeded in fixing the gold value of the rouble in 1894, she found the provision of a gold reserve a serious strain upon her resources and her credit. The requisite funds had to be raised by means of large foreign loans, and the interest threatened to be a heavy burden

on her budget and on her balance of payments. She therefore accumulated, in place of a part of the gold reserve, a reserve of foreign gold standard currencies in the form of bills and other liquid investments. This reserve was held in the first instance in Berlin and later also in other centres. The Government offered to buy bills on Berlin at a fixed rate of exchange, paying for them with resources which would otherwise have been used to buy gold. Having thus secured a fund of German marks, the Government could thereafter offer to sell marks to all comers at a fixed rate of exchange. To anyone who would otherwise have withdrawn gold for export a cheque or bill on a foreign centre like Berlin would serve just as well, for marks were equivalent to gold in Berlin, and the rate of exchange at which the Russian Government sold marks was so arranged that it would be slightly more profitable to anyone to buy marks than to take gold. Thus this reserve of foreign bills adequately served the purpose of a gold reserve; and it had two great advantages, in that it yielded interest, and that its increase or decrease did not unsettle the world market in gold.

This plan was extensively imitated. Austria-Hungary adopted it, and so did India. Many other countries kept small reserves of foreign bills to the credit of their Central Banks, and used them to forestall demands upon their gold reserves.

The possibility of a gold standard country holding a reserve of foreign exchange instead of a reserve of gold introduces a new factor into the gold market. The holding of a reserve in actual metal, when an interest-earning reserve of bills would serve the purpose as well, is a loss and a burden. Since the value of gold in terms of wealth depends to so great an extent, as we have seen,

upon the demand for it for monetary reserves, a method of economizing the use of it for that purpose to an almost indefinite extent would seriously threaten the stability of its value. But as we shall see presently (below, pp. 99-100 and 230-1), a gold exchange standard can be advantageously employed in conjunction with a system of stabilizing the wealth-value of the monetary unit.

The Gold Clause

The essential characteristic of the gold standard is the systematic maintenance of the currency unit close to a constant value in terms of gold *in international markets*. When the export of gold is prohibited, convertibility into gold at home ceases to discharge this function. Even then a free licensing of gold exports may preserve the gold standard, though only at the discretion of the licensing authority.

At the time of the agitation of the silver party in the United States for a return to bimetallism, which culminated at the Presidential Election of 1896, the practice grew up of attaching to bonds and other long-term debts a "gold clause" in the form of an obligation to pay in United States gold coin of the existing weight and fineness. When the export of gold from the United States was prohibited from September, 1917, to June, 1919, and there arose at times a considerable premium on foreign gold standard currencies, the gold clause was of no avail to secure payment to creditors in the equivalent of gold as valued in international markets. The creditor could only claim to receive gold coin at the place of payment in the United States, where it was worth no more than its face value in paper currency. The prohibition made the value of gold lower in the United

States than elsewhere, just as the existence of a duty on the export or import of a commodity makes its value less or greater at home than abroad.

The United States and Argentina are both ordinarily exporters of maize so that the domestic price in both is governed by the world price. In 1937 owing to drought and short crops the United States became an importer of maize, and as there is an import duty the price rose far above the world price. A trader who had contracted to receive maize in Buenos Aires was at the same kind of disadvantage in comparison with one who had contracted to receive maize in Chicago, as a creditor who was entitled to gold in New York in 1918 in comparison with one who was entitled to receive gold in Amsterdam.

When the gold standard was suspended in 1933, among the measures passed was a resolution of both Houses of Congress (with statutory effect) annulling the gold clause in all contracts. This enactment was challenged as being unconstitutional, and the Supreme Court ruled that it was valid in relation to private contracts, and that, in relation to United States Government bonds, though the abrogation of the gold clause was unconstitutional and inoperative, nevertheless the bondholder had suffered no loss and could not recover damages. The judgment was interpreted in some quarters to mean that the bondholder had suffered no loss because the purchasing power or wealth-value of the dollar had not fallen. But that was a misconception. What the judgment actually said was that the equivalent in currency of the gold coin promised "cannot mean more than the amount of money which the promised gold coin would be worth to the holder for the purposes for which it could legally be used." It was "in view of the control of export and foreign exchange and the restricted domestic use"

of gold that purchasing power had to be taken into consideration. That is to say, the purchasing power of gold coin "in relation to transactions legally available" would have been no greater than that of the dollars actually received.

CHAPTER III

THE GOLD STANDARD FROM 1717 TO 1914

Guineas

So far as Western Europe is concerned, the gold standard is a modern development. In the Middle Ages the Byzantine Empire, which preserved unbroken the great tradition of Roman civilization, maintained a gold standard, and when this tradition spread during and after the Crusades to the Italian mercantile cities on the fringe of feudal barbarism, the use of gold spread with it. Florence had her gold florins, and Venice her gold sequins or ducats. But gold became and remained only a merchants' medium. The principal standard of value continued throughout Western Europe to be silver.

Gold coin in each country was given by law a determinate value in terms of the money of account and therefore of silver. But different countries were apt to adopt slightly different ratios between gold and silver, and endless troubles resulted. Gold always tended to flow towards those countries where it was valued highest in terms of silver, and these countries found that their silver flowed away in exchange for it. It was an inconvenience to lose the country's whole current stock of gold, for silver was an inconveniently bulky and heavy medium for the larger commercial transactions; to lose any considerable part of the stock of silver currency was simply paralysing, for silver was the indispensable medium for the transactions of every day. The real facts in regard to foreign currencies, including not only the

nominal coinage laws, but also the actual condition of the gold and silver coins in circulation, were difficult to ascertain, and this state of confusion was not dispelled till the eighteenth century.

So far as Western Europe was concerned, the gold standard was practically originated in England. The valuation of gold in terms of silver had been modified several times in the seventeenth century. In 1663 Charles II issued a new gold coin called a guinea, officially valued at £1. A troy pound of gold, $\frac{11}{12}$ fine, was coined into $44\frac{1}{2}$ guineas. As silver, $\frac{37}{40}$ fine, was coined at the rate of 62s. a pound, the ratio of gold to silver (after allowing for the slight difference in fineness between standard gold and standard silver) was 14.485, that is to say, a given weight of fine gold was valued at 14.485 times as much as the same weight of fine silver.

This ratio was too low. Gold was undervalued in terms of silver, in comparison with its value in the European market. But this was a time when the country was undergoing a great and rapid commercial development, and banking facilities were still in a rudimentary state, and almost non-existent outside London. Silver was too bulky a medium to be convenient for mercantile transactions, and gold was almost a necessity. Creditors were willing to accept gold in payment at a premium over its official valuation. Debtors, being entitled to pay, if they chose, in silver, could stipulate for a premium on gold. Guineas were treated as a commodity, the price being determined like that of wheat or iron in a free market. Yet, while their price varied, they were used as a medium of exchange, and merchants were free to make bargains expressly denominated in guineas if they chose.

The premium on guineas had risen high, especially

in 1695 in consequence of the defective condition of the silver coinage, but even after the restoration of the coinage there was still a premium. In 1717, serious inconvenience having been suffered owing to a shortage of silver coin, Sir Isaac Newton, who was Master of the Mint, attributed the shortage to the fact that the current price of 21s. 6d. to a guinea overvalued the gold coin in terms of silver, and therefore undervalued silver in terms of gold. He showed that the ratio at which gold was valued in terms of silver on the Continent corresponded to a price of about 20s. 8d. to the guinea. This was not a case where the statutory valuations of gold and silver coins undervalued silver. The price of the guinea was not a statutory valuation at all, but a free market price, though the practice of accepting guineas in payment of taxes at 21s. 6d. gave some official support to the rate. This is one of those cases where we must distinguish between the money of account, in which debts and credits are reckoned, and the legal tender money in which debts are payable. The fault was not that the guinea was overvalued, but that, given the existing level of prices and wages, the monetary unit of account was itself overvalued in terms of silver by the mint price.

The remedy adopted was to institute a statutory valuation of the guinea at 21s. This was the beginning of our gold standard. For according to Newton's calculations the guinea was still overvalued, and when the credit system of the country had accommodated itself to the new system, it was to the valuation of 21s. to the guinea that the monetary unit was adjusted. Silver was still undervalued, and little of it remained in circulation. Such as did remain could only do so because it had become so worn that it was no longer profitable to melt

or export it. Silver was practically relegated to the position of a subsidiary coinage, though it remained unlimited legal tender till 1774. Gold predominated as the means of payment and the standard of value.

The 21s. guinea represented an increase of 5 per cent. over the valuation of 1663, which had made the ratio of gold to silver 14.485. The ratio was thus raised to 15.21, and became higher than in the rest of Europe.

In 1785, however, a new gold coinage was introduced in France. The effect was to raise the ratio of gold to silver in that country to $15\frac{1}{2}$ to 1. Owing to a high seignorage charge and the French methods of coinage the actual metallic contents of the coin, both gold and silver, as issued from the Mint, were worth substantially less than the face value, so that it did not at once become profitable to melt the silver coin, and for a time the effect of the change on the relative market prices of the precious metals was not felt. But when the issue of inconvertible paper money (which had commenced even in 1788, before the outbreak of the Revolution) began to drive the metallic currency of the country abroad, the silver, still commanding a higher relative price in the bullion markets, tended to go first, and the gold later. In a few years the flood of assignats had driven all the metallic currency either abroad or into hoards. And then when the assignats collapsed in 1795, and the precious metals poured back into France, the coinage ratio influenced the valuation of coins by the French public. The Bourse quoted prices in assignats both for the gold coin, the louis d'or of 24 livres, and for the louis blanc, 24 livres in silver coin, and the price of the latter was as a rule actually a little lower.

Gold was therefore attracted back first. One consequence was to concentrate the demand for bullion on

England, where there was a gold standard, and to reduce the Bank of England's gold reserve to so low a level as to cause the restriction of gold payments. Another consequence was to cheapen silver in terms of gold in European markets. The outflow of silver from France in the early days of the Revolution had not sufficed to bring the ratio of gold to silver up to $15\frac{1}{2}$ to 1, but the return inflow of gold from 1795 onwards soon did so.

For the time being the restriction of gold payments in England had not caused any depreciation of the pound, so that the price of silver was still a gold price. The price corresponding to the ratio of $15\frac{1}{2}$ to 1 was 60 $\frac{3}{4}$ d. The market price of silver in London fell below the coinage price of 62d. an ounce, and silver began to come to the Mint to be coined.

The virtual gold standard to which the English public had become accustomed was founded on nothing but the overvaluation of gold in the coinage system. The temporary limitation on the legal tender of silver, instituted in 1774, had lapsed in 1783. If nothing were done, the country would revert to a silver standard. In 1798 the decisive step was taken. The coinage of silver was suspended, and it again became legal tender (except by weight) only for payments not exceeding £25.

There followed a period of depreciated paper money, in which coinage laws were of merely academic interest. But before the restoration of the currency to parity, which occurred in 1819, the Coinage Act of 1816 had definitely established the gold standard. The guinea was abandoned in favour of the sovereign of 20s., but the coinage price of gold remained the same as had been adopted in Newton's day. A standard ounce of gold, eleven-twelfths fine, was equivalent to £3 17s. 10 $\frac{1}{2}$ d., and a sovereign contained $113\frac{1}{3}$ grains of fine gold.

An ounce of standard silver was coined into 5s. 6d., but there was no free coinage of silver, that is to say, the Government settled the amount of silver coin to be issued at its discretion.

Bimetallism

Meanwhile the coinage system of France, though in other respects remodelled, maintained the ratio of $15\frac{1}{2}$ to 1 between gold and silver, which had been adopted in 1785. Silver was at that time the standard in almost all Europe. In France both silver and gold were equally the standard. That is to say, there was free coinage of both, and both were unlimited legal tender.

This is what is called bimetallism. Provided the ratio adopted in the coinage corresponded to the ratio between gold and silver in the world's markets, gold and silver would both be used as means of payment. The monetary unit would be effectively equal both to its prescribed equivalent in gold and to its prescribed equivalent in silver.

If the gold and silver markets were disturbed, so that the relative prices of gold and silver were altered, this would no longer be possible. Things cannot be equal to the same thing unless they are equal to one another. But it would not be correct to infer that a system of bimetallism is therefore utterly precarious. The bimetallic system itself affects the world market in the precious metals. If the value of silver tends to fall relatively to that of gold, the bimetallic country, offering as it does a fixed price for silver, finds itself compelled to buy unusually large quantities of it. If the tendency is very marked, it will import so much silver that its monetary unit will begin to depreciate relatively to gold,

and the result will be that it will export gold. It will thus become a buyer of silver and a seller of gold, and so long as it continues to discharge this double function the prices of gold and silver in world markets will be at the ratio adopted in the bimetallic system, except for the slight premium on gold required to pay for the collection and melting of gold coin.

There is, however, a limit to this process. The limit is reached when all the gold in circulation in the bimetallic country has been replaced by silver. The fixed price of gold in the bimetallic system then ceases to be effective; the currency ceases for the time being to be bimetallic, and becomes one of silver alone.

In the same way, if gold tends to depreciate, gold is coined and silver coin is melted, till a point is reached at which no more gold can be absorbed, and no more silver can be withdrawn and melted.

The bimetallic country is in the position of a dealer undertaking to buy and sell unlimited quantities of both metals at fixed prices. If the stock of the metals this dealer is prepared to hold is large enough in proportion to the world demand and supply, he governs the world prices of both.

In the first half of the nineteenth century France fulfilled this condition. At that period France contained a larger proportion of the total wealth and population of Europe than at the present day. And the French have always tended to hold a large supply of the precious metals in proportion to their wealth and population. In the period from 1815 to 1850 the gold production of the world was small, and France absorbed silver to the exclusion of gold. Bimetallism does not prevent a small premium appearing on whichever metal is being melted down for bullion, and gold was at a premium in these

years. Though the premium would only be just enough to cover the cost of selecting and melting the coins and rarely reached 1 per cent., its existence introduced a slight degree of inconvenience into dealings between countries with a gold standard and those with a silver standard, in that fluctuations in the rates of exchange were to that extent wider than between countries with the same metallic standard. In 1847 Holland, which like France had been bimetallic, adopted a silver standard.

On the other hand, the United States, whose trade was mainly with England, found a silver standard inconvenient. The American standard was nominally bimetallic, but gold was valued at only 15 times the value of silver, and so long as the world market followed the French ratio of $15\frac{1}{2}$, no gold came to the United States for coinage. In 1834 this ratio was revised, but the new ratio was very nearly 16 to 1, and the result was an almost complete displacement of silver by gold in the course of some years.

Spread of the Gold Standard

About 1850 occurred the gold discoveries in Australia and California which were to revolutionize the markets in the precious metals. Floods of gold were let loose upon France, and instead of a premium on gold there was a premium on silver. The French franc from a silver unit became a gold unit. The two great financial centres of the world, London and Paris, were both gold centres.

The period of twenty-three years from 1848 to 1871 was one of wars and revolutions, and the result was to drive many important countries into the use of paper money. In 1871 Russia, Austria-Hungary, Italy and the United States were using depreciated paper. In France

the notes of the Bank of France had been made inconvertible, though they were not seriously depreciated. Belgium and Switzerland had adopted bimetallism, and had, along with Italy, joined France in the Latin Union of 1865. Throughout Europe the silver standard only remained effective in Germany, Holland and Scandinavia. On the other hand, silver still maintained its position in the East.

It was in these conditions that the first step was taken in an evolution which by 1914 had established the gold standard in nearly all the world.

This first step was taken by Germany. Germany no longer derived any advantage from the silver standard in her trade with Eastern Europe, because silver had there made way for inconvertible paper. The bimetallic currencies of Western Europe had passed from a state of fixity in terms of silver, with a slight fluctuating premium on gold, to fixity in terms of gold, with a slight fluctuating premium on silver. In those days German trade with the Far East was not a decisive factor, and it was moreover financed to a considerable extent through London.

Even if the ratio of gold to silver continued to be stabilized by the bimetallism of the Latin Union, the silver standard might be expected to be a disadvantage to the German financial centres. Austria-Hungary had already been considering the adoption of a gold or bimetallic standard as soon as she should escape from inconvertible paper, and had started coining eight-florin pieces.

The French indemnity paid in the years 1871-3 supplied Germany with ample resources for carrying out a currency reform. In 1871 was adopted a new currency unit, the mark, which was based on gold. The existing

silver unit, the thaler, was valued at three marks, and the amount of gold in the mark was so determined as to make the ratio of gold to silver $15\frac{1}{2}$ to 1. The vital change was that henceforward there was to be free coinage of gold and no free coinage of silver. The thaler was no longer to be coined at all, and the coinage of silver was to be confined to subsidiary coins of limited legal tender, issued at the discretion of the Government.

Germany thereupon started buying gold and selling silver on a huge scale. In two years gold to the amount of a milliard of marks or £50,000,000 had been acquired and coined. This was much more than the world's bullion markets could stand. The price of gold in terms of silver was quickly forced up. Bimetallism was not in full operation at the time. In both Italy and France the paper money had been made inconvertible, and, though in France it was not depreciated, gold could not be freely obtained there. There was nothing to relieve the sudden scarcity of gold, and the price of silver in gold began to fall. But that meant that the currencies of silver-using countries began to depreciate. And in bimetallic countries it meant that silver would take the place of gold as the principal basis of the currency unit, and the same depreciation would occur.

The only remedy was the suspension of the free coinage of silver. This was quickly adopted in Holland, Sweden and Norway and Denmark, and soon afterwards by France and her associates in the Latin Union. Silver ceased to be a standard of value in Europe. Gold became the standard throughout the Continent except in those countries which were using depreciated paper money.

The old standard silver coins remained in circulation. Germany had intended to withdraw the silver thalers, but when the price of silver fell this could only be done

at a loss. The five-franc pieces of the Latin Union remained in circulation. The value of the silver in a five-franc piece was soon far below five francs, but so long as the supply of such coins was not sufficient to meet the needs of the public for metallic currency, gold had also to be in circulation, and that meant that the value of the franc was bound to keep up to its gold equivalent.

Thus the five-franc pieces in France and the thalers in Germany became tokens, like the subsidiary silver coins, but differed from them in being unlimited legal tender. In fact, the suspension of the free coinage of silver made it possible to keep up the value of the silver coins by a limitation of supply, while the free coinage of gold determined the precise point to which their value should be kept up.

As the five-franc pieces were inconvenient to handle, the greater part of them found their way into the bank reserves. The Bank of France had a very large holding of them, and was in a position to stave off inconvenient demands for gold by offering to redeem its notes in silver of unlimited legal tender instead. Such a course would lead to a small premium on gold, but the premium could never become substantial so long as there was a supply of gold coin in active circulation, passing in and out of the other banks, and available for sale as bullion if anyone chose to accumulate it and melt it.

In course of time the stock of these token silver coins of unlimited legal tender was gradually diminished, because they were melted down and used in the production of ordinary subsidiary coins of smaller denomination and limited legal tender, but at the outbreak of war in 1914 there were still many outstanding, especially in the Latin Union.

In the countries with nominally silver standards, but actually inconvertible paper money, the question of suspending the free coinage of silver arose at a later stage. In Austria-Hungary the paper money was found to be at par in 1879. This was due not so much to a rise in the value of the paper as to a fall in the value of silver. Had the free coinage of silver been maintained, the country would have immediately had an effective silver standard. Rather than appear as the one country with a silver standard in a gold-using Europe, the Austrians followed the example set by their neighbours and suspended the free coinage of silver. But for the moment no value was fixed for their paper money in gold, and for some years they possessed a paper standard which was *above* its nominal value in silver. In 1892 they adopted a gold unit, and in 1900 they made it effective.

Russia had a somewhat similar history, having suspended the free coinage of silver in 1893 and soon afterwards adopted a gold unit. Spain, on the other hand, though she suspended the free coinage of silver, never made the free coinage of gold effective. Her currency unit, the peseta, was represented in circulation by paper and token silver. Its value, while much above the nominal silver equivalent, remained below the nominal gold equivalent till after 1914. Otherwise practically the whole of Europe attained an effective gold standard.

The United States had in effect had a gold standard before the Civil War. In 1873, in the midst of the régime of depreciated paper to which the Civil War led, a Coinage Act had omitted the silver dollar from the list of standard coins.

But in 1879, when the paper money had been successfully raised to parity and made freely convertible into gold, protests were heard against this abandonment of

silver. The silver-mining interests were politically powerful in the United States. They were suffering from the fall in the value of silver, which had been caused by the sudden cessation of the demand for it as currency in Europe, and they objected to their own country joining in a movement so injurious to them. The ratio of 16 to 1, which had been so far above that prevailing in the market as to exclude silver from circulation, no longer overvalued gold. In fact, it undervalued gold to such an extent that the free coinage of silver at the old coinage price would have entirely displaced gold from circulation, and would have placed the country practically on a silver standard. A compromise was arrived at, under which silver dollars were to be coined, not freely and in unlimited quantities, but up to a prescribed annual amount.

In 1893 the amount of silver so coined became a serious embarrassment. The gold parity of the dollar was imperilled. When the great financial crisis of that year broke out, the coinage of silver dollars was hastily stopped. The question of the currency was brought into the political arena, but the silver interests were decisively beaten at the Presidential Election of 1896, and the Gold Standard Act of 1900 placed the country unequivocally on the gold standard.

The greater part of Latin America had formerly had silver or bimetallic currencies, but had lapsed into inconvertible paper. Those countries which emerged from this state of confusion, such as Peru, Argentina, Uruguay and Mexico, adopted gold. Others, such as Chile and Brazil, were progressing towards a gold standard. None thought of reverting to silver.

In the East controversy had centred in India. The severing of the bimetallic tie between gold and silver

was a serious embarrassment to the intimate financial and commercial relations between India and England. After suffering for twenty years from the growing fluctuations in the London price of silver and therefore of silver rupees, the Indian Government decided in 1893 to suspend the free coinage of silver. The restriction of the supply of rupees soon pushed up their value above that of their silver contents. They became token coins, like thalers or five-franc pieces. But for a few years they differed from these coins and rather resembled the Austro-Hungarian paper money in having no fixed gold value.

From 1898 onwards the rupee was fixed at a rate of 1s. 4d., or 15 rupees to £1, by an ingenious application of the gold exchange standard. Similar measures settled other Far Eastern currencies on a gold basis, till in 1914 China almost alone in the whole world retained a silver standard.

From the foregoing brief summary of the introduction of the gold standard it will be seen that the choice to be made was always between different metallic standards, silver, gold or bimetallic. Inconvertible paper money was common enough, but was not regarded as a possible permanent standard.

Bimetallism was a device for reconciling the conflict between the advantages of gold for large transactions and of silver for small. But bimetallism worked imperfectly unless it was operated by international agreement of wide extent, and it was in any case liable to be put out of gear by a big disturbance of the balance between the relative supplies of the precious metals. It was the debtor who had the choice of which medium to pay in, while it was the creditor whose convenience was involved in the choice. If there was a scarcity of either metal, debtors

in general, and in particular banks, would insist on making payment in the other, whatever the creditors preferred.

Once token silver came into use to provide a subsidiary hand-to-hand currency of limited legal tender, which would not go to a premium or be melted down, the advantage of bimetallism in providing standard coin of low denomination was very much diminished.

The Preference for Gold over Silver

When there was a straight choice between gold and silver, gold was preferred. In the days of Locke and Newton, when payment by credit instruments was little developed, it was economy of bulk and weight that gave gold the advantage as a merchants' medium. A thousand guineas weighed about $18\frac{1}{2}$ lb. (avoirdupois), whereas at 62d. an ounce £1,050 in silver weighed nearly $2\frac{1}{2}$ cwt. As the handling of gold came to be superseded by the use of credit instruments, notes, bills, drafts or cheques, economy of bulk and weight lost much of its advantage. When it was a question of transporting the precious metals from one centre to another, there was little difference in the cost of transport. Insurance was at least the same for gold as for silver, and greater precautions added to the cost of handling and stowing gold.

Yet there was a very definite preference for gold. It must be remembered that specie standards, not bullion standards, were the rule. When the state of the exchanges on any centre made an export of the precious metals profitable, the banks could only be required to supply them in the form of *coin*. The coin at the end of its journey would have to be melted down and recoined in order to be used as money.

The cost of coining a given *value* of silver was much greater than the cost of coining the same value of gold. That was so even though the coining of gold in itself was a more expensive process. The cost of coining a given *weight* of gold might be three or four times that of coining the same weight of silver, yet the cost of coining the silver would be four or five times as great in proportion to value.

The high cost of coining operated as a tax on international movements of silver. The export and import specie points were further apart for silver than for gold. Whenever a bimetallic country had occasion to import or export the precious metals, gold would be preferred and would go first, unless there was a relative scarcity of gold. And even in silver standard countries banks would make a practice of holding gold (just as the Bank of England was empowered to include a proportion of silver bullion in its reserve). They would be prepared to buy and import gold at a stage when it was still not profitable to offer silver bullion to be coined.

The Banks of Amsterdam and Hamburg, in adopting the practice of buying and selling silver in the forms of bullion and foreign coin, dispensed their own mercantile communities from the expense of recoinage. They were in effect practising a silver bullion standard. But elsewhere the preference for gold in international settlements made itself felt. That goes far to explain the superior prestige of gold, which led to the general adoption of the gold standard in the nineteenth century.

The Monetary Demand for Gold, 1871-1914

The controversies between gold, silver and bimetallicism are obsolete. The question which is discussed nowadays

is whether it is possible to dispense with a metallic standard altogether.

Nevertheless the experience of the hundred years preceding the war of 1914 is full of valuable lessons.

In the first place the history of bimetallism illustrates in the most convincing way the predominant power of monetary policy over the gold and silver markets. The theoretical bimetallists hoped for an international agreement establishing the free coinage of gold and silver throughout the civilized world. In the period from 1803 to 1871 bimetallism was confined to France and two or three other countries, and yet their monetary demand sufficed to keep the ratio of the world price of gold to that of silver within a fraction of their coinage ratio of $15\frac{1}{2}$ to 1. The system stood successfully the strain imposed upon it when the gold discoveries of 1849 and 1851 suddenly raised the annual output of gold, which till 1840 had rarely reached as much as £3,000,000, to £20 or £30 millions. In the years following 1870 there was a slackening in the output, but this by itself would rather have favoured than have endangered the continuance of bimetallism. The event which brought it to an end was the adoption of a gold standard by Germany. Here again, therefore, monetary policy was the decisive cause. It was Germany's sudden demand for £50,000,000 in gold that drove her neighbours to suspend the free coinage of silver.

In those days the stock of monetary gold was small compared to that which we see heaped up in the great banks of issue and other reserves to-day. In Europe there was no great concentrated stock outside England and France. Gold circulated in the British Colonies. A moderate amount remained in circulation in the United States despite the use of depreciated paper money.

No doubt also a considerable amount of gold was scattered all over the world in countries where it was not the regular standard, being a convenient medium for hoards and reserves. But the total of gold used for monetary purposes in the world (apart from hoards in the East) was under £600 millions.

The immediate effect of the suspension of the free coinage of silver in Europe was to concentrate the whole demand for additional metallic currency upon the gold supply of the world. As country after country passed from inconvertible paper to gold, the demand was intensified. The United States, France, Italy, Russia, Austria-Hungary and many smaller countries accumulated gold reserves. The annual output of gold was insufficient to meet these demands, and the inevitable consequence was a rise in the value of gold in comparison with other commodities. So long as the bimetallic system was effective, the price of silver had always remained close to that of 60½d. an ounce, corresponding to the ratio of 15½ to 1 between gold and silver. By 1903 the price of silver had fallen to 22d., corresponding to a ratio of nearly 43 to 1.

The world used two metallic currencies. If their relative value could change to so great an extent, it is certain that they could not *both* be stable measures of value. Their instability was due to changes in currency policy on the part of the principal countries. A great part of the demand for metallic currency had been diverted from silver to gold. The value of gold in silver had been thereby very nearly trebled. One at any rate of the two metals and probably both must have been unreliable in the essential functions of a standard of value.

Since there is nothing in the circumstances of either

metal to make it more stable in value than the other, are we to be driven to the conclusion that the precious metals are inherently defective for that purpose? That would be a mistake. The true moral of nineteenth-century monetary experience is rather that the defects in gold and silver as standards of value have been attributable to causes *within human control*. Governments have been too prone to modify their currency systems without regard to the reactions they might cause in the world markets for the precious metals, and therefore in the currency systems of their neighbours. The most conspicuous example is the adoption of a gold standard by Germany in 1871. But other instances might have been cited.

The Wealth-value of Gold

On the other hand, it may be contended that there have been big changes in the value of gold or silver due to increases or decreases in production. In order to pursue further our critical examination of the experience of the nineteenth century we must look beyond the relative value of gold to silver, and consider (what is really the essential test of a measure of value) the value of gold in relation to commodities in general, its wealth-value.

In such an investigation we must employ index numbers of prices. We take a representative selection of commodities and work out the average of the percentages by which their prices have changed over any period. This average may be regarded as measuring the change in the general level of prices. It is the inverse of the change in the wealth-value of the currency unit, and, under the gold standard, of gold. If the index shows a

fall of 10 per cent. the wealth-value of gold has risen in the proportion of 100 to 90. The index number is, of course, affected by many other causes besides the purchasing power of money, such as changes, whether permanent or transitory, in supplies of natural products, changes in methods of production, or changes in the uses to which products may be put. Particularly when we are estimating changes in the wealth-value of money over long periods must we have regard to the persistent tendency of real costs of production to be reduced by technological progress.

Index numbers of prices have been worked out for this country for the whole of the period we are considering, and the results are instructive. If we look at the general tendencies disclosed, we find four clearly marked periods between 1819, when the currency was restored to par with gold, and the outbreak of war in 1914. The first period is one of falling prices, and lasts till 1850. The second is one of rising prices, and lasts till 1873. The period from 1873 to 1896 is again one of falling prices, and finally prices rise again from 1896 to 1914.

It is a fact that the periods of rising prices were periods of large gold production, and those of falling prices of small or relatively small gold production. But the gold production between 1873 and 1890, though slightly less than between 1850 and 1873, was enormously greater than before 1850. It was almost certainly sufficient to sustain a continued rise of prices, though not so rapid a rise as in the preceding period, had conditions remained unchanged. But the suddenly increased demand for gold as currency was more than the supply could keep pace with, and equilibrium necessitated a fall of prices.

The fall between 1873 and 1896 amounted to 45 per cent. That figure by itself exaggerates the extent of the disequilibrium. The fall of wages was slight. Mr. G. H. Wood's index number of wages (100 in 1850) fell from 155 in 1873 to 146 in 1879, and thereafter varied little till 1887, when it was 149. That is not to be interpreted, however, as evidence that the appreciation of gold was similarly slight, for there was grave disequilibrium in the labour market in the form of severe unemployment. Though there was on balance a substantial fall in the price level from 1887 to 1896, the index dropping from 68 to 61, the strain was by that time being eased. A period of active trade intervened from 1888 to 1891, and in the depression which followed the wage index was higher and unemployment less severe. The output of gold was already increasing.

In the period between 1896 and 1914 the transition to the gold standard had been practically completed, and the output of gold rose far above the highest figure known before. Prices rose about 40 per cent.

The gold standard has been criticized on the ground that these changes in purchasing power make gold unfit to be a standard of value for long-period contracts, such as debentures, leases and national and municipal debts. Undoubtedly uncovenanted gains and losses did arise in this way between debtors and creditors, but they were spread over long periods and were not formidable in comparison with the other chances of economic life. The prospect of gain or loss from a change in the purchasing power of gold was not a serious motive in the economic actions of individuals, and when it occurred people were hardly conscious of it. They measured all values by money, and were content to regard money as

fixed, without testing this opinion by constructing index numbers of prices, so long as they were not confronted with such flagrant variations as might occur with the abuse of inconvertible paper.

The Trade Cycle

But this is not the whole case. A closer scrutiny of the statistics of prices will show that superimposed on these long-period movements in the period 1819 to 1914 is a series of oscillatory movements, extending over periods of usually from seven to eleven years. The price level rises to a maximum, drops again, and from the low point rises to a new maximum. The extent of the movement is large, the maximum often being as much as 20 or 25 per cent. above the minimum.

Is this periodic fluctuation in prices a monetary phenomenon? That is to say, are we to interpret it as a change in the value of gold? It certainly seems that we must. If we look for any non-monetary cause, we shall not find it in any periodical changes in the volume of production. There is indeed a periodical fluctuation in production, but production is at its highest just when the price level is at its highest.

If prices rise just when supply is plentiful, that must be because demand is increasing. But what is demand? It is simply the money that people have to spend; it approximates closely to that which I have called the consumers' outlay. The *relative* demand for different products depends on the relative intensity of people's desires for them. But the general demand for *all* products, whether goods or services,

does not depend on people's desires. It is simply the total of their incomes, whatever their desires may be.*

Therefore the periodic fluctuations in the value of gold must have been due to periodic fluctuations in the money income of the community. For this purpose the "community" means all the inhabitants of the gold-using countries.

Now we have already seen above (pp. 13-14) how this total money income may be affected by credit policy. When the banks begin to lend too freely, people have bigger incomes to spend, and prices rise. The gold standard regulates their lending and puts a limit to it. Firstly it compels all the gold standard countries to keep pace with one another in expanding credit, for any one of them which outstrips the others loses gold. Secondly, an expansion of credit, with the consequent increase in incomes and prices, leads eventually to more currency passing into circulation. If this currency has to be either gold coin or paper money wholly or partly backed by gold, the effect is to encroach on the available supplies of gold in the gold standard countries, till at last the expansion of credit has to be stopped.

The flow of currency into circulation in such circumstances is *very gradual*, and lags far behind the expansion of credit which causes it. The result is that, if the authorities controlling credit are guided in their action by the adequacy of their stock of gold, their intervention is bound to be very tardy. And the expansion and contraction of credit are both likely to be very slow processes in a group of countries which are all made to

* There may be a portion of the consumers' income which does not materialize in demand; it may be retained in consumers' balances or intercepted in the investment market. But any such reduction of demand would be quickly reflected in a reduction of activity and therefore of the consumers' income.

keep pace with one another by the rather cumbersome expedient of gold movements.

Hence the very slow rhythm of the movements in the price level, which we are now studying. So far as any inequitable disturbance of the relations of long-term debtors and creditors is concerned, these movements matter less than the long-period movements we have already considered, because the rise and fall compensate one another. But that does not mean that they are innocuous. In fact, the periodic movement of the price level is a part of the trade cycle, which has been the subject of so much controversy.

If the foregoing interpretation is correct, the trade cycle is a *credit* cycle, and is traceable to a defect in the gold standard as a regulator of credit. Conformity to the gold standard sooner or later keeps a credit movement within bounds, but *not soon enough*. The credit cycle occurs because it takes years for the restrictive influence of gold to make itself felt.

The trade cycle has been the source of very serious evils. The greatest is the occurrence of epidemics of unemployment whenever a prolonged contraction of credit becomes necessary. Outbreaks of unemployment occur from multifarious causes in particular industries. But the epidemics of unemployment which actually vex us are caused by the paralysing influence of a credit contraction. The credit contraction works its way by cutting short the flow of purchasing power, and the shrinkage of demand discourages production. The fall of prices follows, and is in itself a relief, but the fall, while in progress, inflicts loss on traders, and so intensifies the discouragement to production. It is the decline in production thus caused that makes itself felt in unemployment.

Wages cannot easily be adjusted to the fluctuations in the value of the currency unit, which are characteristic of the trade cycle. Any wage settlement in any industry which does not take account of them soon requires revision. Some of the industries most susceptible to the influence of the trade cycle, conspicuous among which was coal mining, adopted sliding scales of wages, depending upon the selling price of their products. But this is not always possible, and, even when it is, the adjustment is never perfect.

Even a precise adjustment of wages in proportion to the price level, so that prices and costs move together, would not ensure the continuance of full employment. So long as traders expect a *further* fall of prices and of costs they will tend to retard production. Only if wages could be reduced at a stroke to the full extent to be anticipated, would this restrictive effect be avoided. Yet when a measure of monetary restriction is initiated, no one can guess, within a very wide margin, what reduction of wages it will call for.

During the war of 1914-18 and the inflation and deflation that followed it (below, pp. 95-7) recourse was had in the greater part of industry to the regulation of wages by a scale of cost of living. That was an approximation to a solution, but imperfect on account of the lag of retail prices behind wholesale prices, and of non-monetary causes affecting retail prices. In the trade cycles of the nineteenth century and up to 1914 the maladjustment of wages was a perpetual source of friction.

The trade cycle also proved extremely detrimental to the interests of traders and capitalists. The great financial crises of the nineteenth century were caused by the collapse of prices that follows a too precipitate contraction of credit. When a contraction begins, all

gold standard countries must participate in it, on pain of losing gold to their neighbours. A country which fails to do so, and finds its gold reserves depleted, is compelled to adopt a more drastic credit contraction if it is to restore its situation and maintain the gold standard.

Bank rate is put up to a very high rate, banks restrict their lending, and merchants and dealers in commodities, who have been relying on borrowed money to hold stocks of goods, are driven to sell. Forced sales drive down prices, and make traders bankrupt. Banks which have lent to the insolvent traders are themselves endangered, and panic supervenes.

Apart from the terrors of financial crises the alternation of feverish activity with depression inflicts undesirable risks on the business of producers and traders, in that the most conspicuous changes in their profits are brought about by causes which are not within their control, or even within their knowledge, unless they study economic conditions outside their own business.

Now it would certainly be unwarrantable to argue that the trade cycle or credit cycle is *caused* by the gold standard itself. The active cause is the inherent tendency of credit to expand. The gold standard enters into the matter in the first place as putting a limit to the possible expansion, and necessitating a subsequent contraction; secondly, as imposing a slow pace upon both expansion and contraction; and thirdly, as allowing expansion and contraction successively to go far before they are checked and reversed. Of these three characteristics the first two are in themselves desirable, and if the gold standard does not fulfil them altogether satisfactorily that is entirely because of the third.

That a limit must be imposed to any credit expansion

almost goes without saying. It is hardly necessary to refer to the calamities which have so often accompanied monetary collapse. That credit expansion and contraction, if they occur at all, should be as slow and moderate as possible is also a proposition that should command general assent, though there may, no doubt, be exceptions to it. The defect in the gold standard is that it gives too tardy a warning that expansion has gone too far.

But this defect is not inherent in the gold standard itself. It is rather a characteristic of the practice of the nineteenth century in applying the gold standard. The absorption of currency into circulation, with the consequent encroachment on gold reserves, was relied on as the signal for the contraction of credit. It must be remembered that we are here considering movements which affect *all* gold standard countries together. The export of gold was regarded as a signal for credit contraction in the country which suffered it. But then it was equally a signal for credit expansion in the countries which received the gold, and the only effect was to make all gold standard countries keep pace with one another either in expansion or in contraction of credit.

If an expansion of credit was to be stopped by a shortage of gold, that shortage could only be caused by the absorption into circulation either of gold coin or of paper money backed by gold. It is this absorption which was too slow of action to be a suitable guide in the control of credit.

CHAPTER IV

WAR, INFLATION AND DEFLATION, 1914-25

Inflationary Finance

THE outbreak of war in 1914 found the international gold standard established on an apparently firm foundation in far the greater part of the world. But the system failed to stand the strain of war finance.

The war compelled the belligerent Governments to raise colossal sums of money at a time when the investment markets of the world were in a state of utter disorganization. Such sums as could be raised by taxation were insignificant compared to what was required. France and Germany imposed no additional taxation worth mentioning till the war was half over. For the main portion of war expenditure borrowing was the only resource, and big war loans were floated. But the money raised by these loans was insufficient, and the balance had to be made up somehow. No belligerent could afford to let the national effort be limited to something less than the maximum by a hitch in the financial machinery.

It is fatally easy to create money out of nothing by borrowing from banks and issuing paper money. Belligerent Europe turned to this expedient, not merely to provide the indispensable balance which might have been needed to fill the gap after every other financial resource had been exhausted, but to escape the unpopularity of heavy taxation and to avoid appealing to the investor at inconvenient moments. Some Finance

Ministers found it so surprisingly easy to raise money by the issue of short-term securities like Treasury bills, that they actually seem to have preferred this to other methods. That was particularly so in France, where no long-term loan was issued till fifteen months after the outbreak of war.

Inflationary finance is about as prudent as eating the seed corn. Nothing could so aggravate the difficulties of raising money as a loss of confidence in the currency. The statesmen of 1914 never thought of that. The issue of Treasury bills, or Bons de la Défense Nationale, was the line of least resistance. Compared to the direct borrowing from the Central Banks of Issue it even looked virtuous. The result was inflation, and by the end of the war inflation had in some countries got completely beyond control.

To regard the gold standard as a safeguard against this kind of financial profligacy is a delusion. The gold standard can only be established in a country by legislation. In an emergency it can be swept away at a moment's notice by new legislation. The responsibility for the currency may be formally placed upon an independent Central Bank, free from Government interference, but the most scientifically conceived plan always remains at the mercy of the legislature.

The legislature indeed may not abandon the gold standard at the very beginning as France, Germany, Russia and Austria-Hungary did in 1914, but may keep it going as long as circumstances allow. Convertibility into gold will then stave off the depreciation of the currency unit for a time. While it lasts, it counteracts the effects of inflationary methods of finance. The Government creates new currency to meet its needs, but when notes are converted into gold, and the gold is exported,

the amount of currency is diminished. In effect the Government is enabled to finance itself by the sale of the gold instead of by increasing the supply of currency.

This resource depends on the existence of a gold standard not in the country itself, but in the foreign countries to which the gold is exported. The use of the gold would be equally effective in avoiding inflation if it were placed directly at the Government's disposal and turned into foreign credits, without the formality of issuing redundant paper money to be redeemed by it.

But a gold reserve cannot give anything more than a temporary respite from inflation. And all the evil consequences of inflation will follow as soon as the gold reserve is exhausted, or the exports of gold are stopped.

The gold standard can only act as a preventive of inflation by giving the authorities of the country an inducement to avoid inflationary methods. Avoidance of inflation requires courage in imposing heavy taxation and in drastically restricting lending by banks to traders. A simple objective, such as the maintenance of the currency unit at par with gold, will help all who oppose inflation to make out their case and to rally support. But it will be of little value unless they understand the means by which their objective is to be attained. Nor will they hold their own in controversy if they make a mere fetish of gold; if they are to withstand the urgent demands of distracted finance ministers for the creation of the means of payment, they must be able to show how disastrous the effects of inflation are likely to be. In fact, the only possible safeguard against inflation is a comprehension by the financial authorities of its consequences. No institutions, however scientific or cunningly devised, can be a substitute for their wisdom and courage.

In 1914 the financial authorities of the world were found wanting. England alone among the belligerents maintained the convertibility of paper money into gold. Even there the export of gold, though legally free, was so obstructed, partly through the inevitable difficulties of transport in war-time and partly through official pressure, that the gold standard ceased to work. The difficulties of war finance were enormously increased by various expedients of an inflationary tendency which were resorted to. Early in 1919 a Proclamation prohibited the export of gold, and the formal suspension of the gold standard was thus put into effect.

The belligerent Governments sold much of their gold to neutral countries to pay for urgently needed supplies. But the greater part of the gold-using world was at war, and the demand of the remainder for gold was swamped by the enormous quantity let loose. The result was a great rise of prices in the gold-using countries, that is to say a depreciation of gold itself in relation to commodities. The three Scandinavian countries actually suspended the free coinage of gold and the purchase of gold by their Central Banks, so that their paper currency was at a premium over gold. And the same thing happened in Spain, where the mint was not equipped to fulfil its statutory duty of coining gold.

In 1917 the greatest of neutrals, the United States, became a belligerent and prohibited the export of gold, and there ceased to be any semblance of a world gold market. Nor was the market fully reconstituted in the years immediately following the Armistice.

In 1919 the United States withdrew the prohibition on the export of gold, and large amounts were exported to countries such as Japan and Argentina, where the gold standard still remained in operation. By May

1920, the price level in terms of gold, as measured by the American index number, was $2\frac{1}{2}$ times what it had been in 1913, or in other words the value of gold in terms of goods was only two-fifths of what it had then been.

The Post-war Deflation

There followed a violent contraction of credit in the United States, which reduced prices by more than 40 per cent. in twelve months. Other countries which had till then preserved the gold standard were unable to keep pace with this precipitate movement, and soon the United States was the only country in which the gold standard remained operative. There being no other buyer of gold for monetary purposes, all the surplus gold of the world gravitated thither.

These tremendous changes in the value of gold differed in degree but not in kind from the changes which we found to have occurred in the nineteenth century. They were due to *changes in the monetary demand* for gold. First of all a number of countries abandoned the gold standard, and let loose their gold reserves to swamp the market, much as the abandonment of the silver standard swamped the silver market after 1872. Then the United States intervened as a buyer of gold, and raised the value of gold in the world market, just as Germany had raised it in 1873, and other countries by adopting the gold standard in subsequent years.

Attention had everywhere been attracted to the question of the currency, and at a time when the principal nations of the world were looking forward to the restoration of the gold standard as the only escape from chaos, criticism was directed against the imperfections of that standard itself. Not only had recent experience shown

that the wealth-value or purchasing power of gold might be exposed to violent fluctuations, but the gold market had for the time being come under the arbitrary discretion of the United States. The market for gold and the market for dollars were one and the same.

In the nineteenth century people had been content to assume that the world market in the precious metals was big enough not to be disturbed by movements originating in any one country. They took it for granted that gold or silver could be bought or sold "abroad," much as an electric current can be directed "to earth," and that is the end of it. This was a mistake even in the nineteenth century. The steadying effect of bimetallist France, and the unsteady effect of Germany passing from silver to gold, are outstanding examples to show that the monetary demand of one great country was not small in relation to the world market. And in 1922 the world market in gold was practically coterminous with the monetary demand of one great country.

The Genoa Conference

At the Genoa Conference in April, 1922, representatives from all Europe, and outside Europe from Japan and the British Empire, met together to consider their economic future. The most fruitful section of the Conference, perhaps the only one that produced any substantial results, was that which was concerned with currency. In saying that all countries must avoid inflationary finance and stabilize their currencies, and that stabilization meant stabilization in relation to gold, the Conference was merely repeating what had been said often enough before. What was a real step forward was a scheme of reconstruction, which recognized the

influence of each country's currency system on the world demand for gold, and therefore upon the monetary affairs of all the others.

The scheme aimed at the co-operation of the Central Banks of Issue of the principal countries in the regulation of credit with a view to preventing undue fluctuations in the purchasing power of gold. Before 1914 each Central Bank used to use its power of regulating the purchasing power of the currency unit of its own country to keep its gold holdings up to the prescribed amount. All the currency units had to keep near gold parity. The value of every currency in relation to every other was approximately fixed, but the value of all in terms of commodities varied, because the value of gold varied. To each country the value of gold appeared as something decided by forces independent of it, but in fact these forces were simply the resultant of the monetary demands of the different countries themselves. If the Central Banks co-operated, they could control these monetary demands, and the value of gold would conform to the value of the currency units instead of the value of the currency units conforming to the value of gold.

But to control the monetary demand, they must be prepared to buy and sell gold at their respective fixed prices *without limit*. If the consequent increase or decrease in their gold reserves became unmanageable, the plan would break down. Even an excessive increase in gold reserves was not a contingency to be entirely disregarded. But most of the countries represented at the Genoa Conference were far from being threatened with a superabundance of gold, and the danger to be more specially provided against was a shortage of gold.

The gold proportions of the Central Banks had been

settled in the past by rule of thumb, with but little regard to the real extent of the probable demands upon them. What were these demands likely to be and how determined?

In the first place the hand-to-hand currency in circulation need not be of gold. In those countries which before the war had been the greatest users of gold coin—England, France and Germany—people had become thoroughly used to paper money. Efforts in Switzerland and Holland to reintroduce gold coin into active circulation failed. A gold bullion standard, such as Ricardo advocated, can effectively prevent gold coin from entering into circulation.

If the entire needs of the community for currency are met by paper money, together with subsidiary token coins, the gold reserve is required solely for the purpose of meeting an external demand. There may be a statutory requirement that the issues of paper money be covered in whole or in part by gold, but that is merely a device for securing the accumulation of gold to meet external demands.

Here was a great economy of gold, but the Genoa plan did not stop there. We have already referred at the end of Chapter II to the device known as the gold exchange standard, by which a country can keep its currency on a gold standard by the use of a reserve composed of liquid securities in the currency of another country which is on a gold standard. It can offer to exchange its own currency into that of this other country and back on demand, and so long as the two currencies are thus interchangeable, and one is fixed in terms of gold, the other will be fixed in terms of gold too.

The Genoa Conference recommended that this system should be generally resorted to by gold standard coun-

tries, certain among them undertaking the function of being "gold centres," at which gold itself should be freely dealt in. Were that plan followed out to its logical conclusion, all gold reserves except in the gold centres themselves could be dispensed with, and even in the gold centres the only reserves strictly necessary would be such as would meet any excess of the industrial demand for gold throughout the world over the output of the mines. Since the industrial demand is much less than the output, it would seem that practically the whole monetary supply of the world would become redundant.

Now the starting-point of the whole scheme was the stabilization of the wealth-value of gold. If the value of gold in relation to other commodities was to remain unchanged, the supply of gold must not be increased in comparison with the demand. It follows that no part of the existing gold reserves, superfluous though they might be, could be disposed of.

Gold withdrawn from monetary purposes could only be sold for industrial purposes. But the industrial demand could be stimulated only by reducing the cost of the gold to the industrial consumer, and as the price of gold in currency units is assumed to have been fixed, that would mean a depreciation of the currency unit. Gold would then be cheapened not by lowering its price but by raising the prices of all other things.

That is ruled out by the policy of stabilization. Not only is there a limit to the economy of gold through the gold exchange standard, but the Genoa plan requires, if need be, that redundant gold reserves be held idle.

The Genoa plan was to have been put into operation by a conference of Central Banks, which was to be summoned by the Bank of England. As Sir Laming

Worthington-Evans said in his speech introducing the resolutions of the Financial Commission at the plenary meeting of the Conference on 3rd May, 1922, "The power to influence prices and the responsibility for using that power belong to the great Central Banks. In currency policy they are the directing intelligence, and therefore the first practical step to be taken will be the meeting of these Central Banks, which is to be called by the Bank of England. It may be hoped that the result of that meeting will be such co-ordination of credit policy throughout the world as will enable the great banks to make the general level of prices more stable. This policy presupposes the general return to the gold standard. Nevertheless in the interval before that general return has been completed, the co-operation of Central Banks can undoubtedly do much to introduce stability and confidence into business."

The years passed and no conference of Central Banks was called. In 1926, after Great Britain and many other countries had returned to the gold standard, Sir Charles Addis, who along with the Governor of the Bank of England represented the Bank before the Royal Commission on Indian Currency and Finance, referred to the matter: "Apart from the fact that Italian, French and Belgian currencies cannot yet be said to be stabilized you have also to remember that, when that has been accomplished, it may not be long before the banking resolutions approved by the Powers at the Genoa Conference will come into play. A deliberate and concerted attempt will then be made by the Central Banks of Europe to prevent undue fluctuations in the future value of gold." (Question 13724.)

By 1928 the Italian, French and Belgian currencies had been stabilized, but no trace of any international

co-operation for the stabilization of prices was to be found in their monetary legislation. And still no conference of Central Banks was called.

The Governor of the Bank offered an explanation to the Macmillan Committee: "It always appeared impossible, during those years when we were waiting, to summon such a conference for the excellent reason that the people would not come. They would not come, not because they were unwilling to co-operate, but because they were unwilling to face the publicity and the questionings in their own countries, which would arise if they attended any such conference, and all the attempts that I made to that end failed." (Macmillan Committee Evidence, Question 9188.) So the plan remained in abeyance.

Stabilization in the United States, 1922-8

A prominent part was played by the United States in the reintroduction of the gold standard after the war of 1914-18. The gold standard was reinstated there in June, 1919, with the cessation of the prohibition on the export of gold. The extravagant inflation and precipitate deflation which ensued in the two years that followed turned the attention of the Americans to the defects of gold as an automatic regulator of the currency.

The Federal Reserve Act of 1913, which established the Central Bank system in the United States, conformed to nineteenth-century theory, in that the Federal Reserve Banks were to be guided by reserve proportions. They were bound (subject to the dispensing power of the Federal Reserve Board) to keep at least 40 per cent. of their note issue in gold and at least 35 per cent. of their deposit liability in lawful money.

In the summer of 1921 a year of deflation had raised the wealth-value of the dollar by about 75 per cent. That meant that the \$20.67 which the mints or the banks paid for an ounce of fine gold had been increased in wealth-value by 75 per cent. The Americans were offering to that extent a higher equivalent for gold in the world's markets, and they swept up the entire disposable surplus. Other countries which were maintaining their currencies at gold parity, such as Argentina and Japan, could not compete; they could not stand the strain of forcing up the value of their currencies, and were compelled to abandon gold parity.

The result was an enormous concentration of gold in the Federal Reserve Banks. In April, 1922, the statutory proportions of note issue and deposits would have required a minimum reserve of \$1,500 millions; the actual reserves were more than double that sum. The prescribed proportions had ceased to have any operative effect.

So far as the Federal Reserve Act gave any guidance, the way was open to another gigantic expansion of credit, and in the course of 1923 the Federal Reserve Banks had to make the choice whether they should acquiesce in this prospect or adopt some new principle of credit regulation outside their statutory limitations.

An indefinite expansion of credit was unhesitatingly rejected, and the new principle of credit regulation was found in a policy of stabilization very similar to that recommended at Genoa, except that the United States, being at the time the only gold standard country, did not have to arrive at any form of international co-operation. Stabilization was not interpreted to mean exact adherence to a price level measured by an index number. Indeed it is well recognized that index numbers are so

subject to disturbance by non-monetary causes that a rigid conformity to them is not really in accordance with the stabilization policy. There are other data from which the symptoms of monetary disturbances can be discerned, such as statistics of employment, production, sales, speculation in commodities, or investments, etc.

The root cause of the trade cycle, as it was experienced in the years 1819-1914, was that the Central Banks of the world acquiesced in the progress of a credit expansion so long as the state of their reserve proportions allowed. To prevent the cycle developing, all that is required is timely intervention by the Central Banks in the early stages. A very moderate restriction on credit expansion, exercised at a time when business first threatens to become unduly active, even though there may have been no visible rise of prices, will suffice to keep control and to avoid the need for a more drastic credit contraction later on.

That was the method adumbrated by the Genoa Conference. In America it was reached by an independent route, and its practicability and effectiveness were magnificently demonstrated. The experience of the United States in the years 1922-8, under the guidance of Governor Benjamin Strong, of the New York Federal Reserve Bank, showed that there is no conflict between financial soundness and economic prosperity. The apparent conflict arises only when financial soundness requires deflation. Avoid inflation, and deflation is unnecessary.

The practical need for the application of the Genoa plan as an international scheme was not felt so long as England and the other principal European countries were off the gold standard. The plan did not require a

universal return to the gold standard, but the problems that the Genoa plan was designed to solve did not arise so long as the purchasing power of gold depended entirely on the action of one country.

CHAPTER V

THE RESTORED GOLD STANDARD, 1925-31

Dear Money and Falling Prices

GREAT BRITAIN restored the gold standard in April, 1925. The Gold Standard Act, passed in May of that year, restored the freedom of export of gold, and established a gold bullion standard at the old gold parity. Fears were expressed (especially by Keynes) that the pound sterling was being forced up to a value unduly high, having regard to the world price level on the one side and the prevalent rates of wages in Great Britain on the other. British wages being expressed in pounds, and world prices in gold, the relation between them would be determined by the value of the pound in terms of gold. If this value were fixed too high, the costs of British producers of importable and exportable goods would be excessive in comparison with the prices at which their competitors were selling.

In that event, either wages must be reduced, or production would shrink and capital and labour would be under-employed. Industry was at the time still in course of recovering from the severe depression of 1921-2. The number of unemployed had approached 2,000,000 in January, 1922, and had fallen to 1,000,000 in 1924. A million was still a very high figure, and industry was in no condition to stand further depression.

When we turn to the actual course of events, we are left in uncertainty whether the restoration of the old gold parity did or did not make costs excessive in relation to

world prices. Trade depression and unemployment did indeed continue, but the world price level was itself changing. If the American index number of wholesale prices be taken as a test, there was a fall from 103.5 in 1925 to 95.4 in 1927. The value of gold in terms of wealth was rising, and the effort required to maintain the pound at a given gold value was therefore becoming greater. As to whether unemployment would have fallen to normal if the wealth-value of the pound had remained what it was in April, 1925, that is a hypothetical question. At any rate, with a *rising* wealth-value of gold, and therefore of the pound, there was no improvement.

Nor was the effect of the falling price level upon the state of industry confined to this country. American industry, which had attained a high degree of activity in 1925, received a distinct setback in 1926 and 1927, and the year 1926 was one of severe depression in Germany.

What was the cause of this development? We have seen how intimate is the connection between credit regulation and the price level (pp. 13-14 and 24-6). By restricting (or relaxing) credit the Central Bank of any country brings about a decrease (or increase) in the volume of lending by the other banks to their customers. There results a corresponding decrease (or increase) in consumers' income and outlay and therefore in the general demand for goods.

Early in 1925, confronted with the approaching restoration of the gold standard and with the need to raise the value of the pound up to parity, the Bank of England put Bank rate up from 4 to 5 per cent. That is a high rate. In the 47½ years that elapsed between the beginning of 1867 (marking the end of the Overend and Gurney crisis) and the outbreak of war in 1914, Bank rate

was at 5 per cent. or more for 319 weeks, or only one week in every eight. *Long* spells at or above 5 per cent. (say ten weeks or over) hardly ever occurred otherwise than at times of great trade activity. In fact the only exceptions were in the years 1878 (22 weeks) and 1884 (12 weeks), and it is significant that these years were followed by the most severe unemployment recorded before 1914 (11.4 per cent. in 1879, and 9.3 per cent. in 1885 and 10.2 per cent. in 1886).

Whether a discount rate counts as high or low depends on the state of business at the time. When demand is expanding, and prices are rising, a rate of 6 or 7 per cent. may hardly be high enough to check the enthusiasm of borrowers intent upon transactions promising a high profit. When demand is stagnant or shrinking, and prices are falling, the holding of commodities involves a loss which may more than eat up the normal commercial profit, and an apparently low rate, 3 per cent. or less, may fail to tempt borrowers to come forward.

At a time of excessive activity a high Bank rate is imposed to check the rise of prices. That is an incident of the trade cycle (above, pp. 86-91). But to apply a rate suitable for such a situation to a state of *depression* is to put the brake on when going uphill.*

In the years 1925-7 a spell of 22 weeks at 5 per cent., followed, after an interval of 17 weeks at $4\frac{1}{2}$ and 4, by 72 weeks more at 5, was an entirely unprecedented treatment of a trade depression.

Formerly depression had invariably been treated with cheap money. The dear money of 1878 and 1884 formed only a very partial exception to this rule, having in each

* It was already possible to see this tendency at work in 1926. See my *Monetary Reconstruction*, second edition, pp. 151-9.

case been both preceded and followed by long periods of cheap money (2 to 3 per cent.).

Given so violent a reversal of previously accepted practice, what calls for explanation is the remarkably moderate effect as measured by the fall of prices. And no doubt it would have been far more severe if the London discount market had been the sole regulator of the world credit situation, as it practically was in the half century preceding 1914.

But the pre-eminence of London as a financial centre had been to some extent emulated by New York. And in the years 1925-8 the influence of New York was on the side of credit relaxation.

The fall of prices was the resultant of the policies of the two centres. In 1927 the American policy of credit relaxation was accentuated, and at the same time the English policy of credit restriction was moderated. There ensued a short interval in which the fall of prices was interrupted in both countries. Industry in the United States soon recovered its resilience, and in the course of 1928 began to expand rapidly. Revival, on the other hand, was hardly perceptible in England.

Thus by the middle of 1928 the two discordant policies, the easy credit of New York and the credit restriction of London, had approximately cancelled out. America had reverted to the state of prosperous activity which had prevailed in 1925; Great Britain had failed to emerge from the state of depression, which people were beginning to regard as chronic. There had, on balance, been a fall of 6 per cent. in the price level as measured by the American wholesale index.

Up to that point the working of the international gold standard, though open to criticism, could not be unequivocally condemned as a failure. Great Britain had re-

entered the system in a state of depression and had had the misfortune to encounter a falling price level which prevented British industry from emerging from the depression. But the fall in the price level had been so limited as to cause no more than a moderate depression in most other countries (the situation of Germany in 1926 was in certain respects exceptional). The working of the gold standard was not ideal, but it was not more defective than in the period ending with 1914.

The year 1928 brought a new phase. The United States turned from credit relaxation to credit restriction. The rediscount rate in New York was moved up by steps from $3\frac{1}{2}$ per cent. to 5 (July, 1928), and the Federal Reserve Banks sold securities. London and New York were no longer pulling in opposite directions. Both were pulling in the direction of restriction, and the year 1929 was to see the restriction becoming more and more felt.

The change of policy in New York is to be explained partly by the heavy losses of gold (amounting to \$500 millions between April, 1927, and June, 1928), but still more by the desire of the authorities to restrain the wild speculation on the New York Stock Exchange. Bank advances obtained by speculators for the purchase of stocks and shares tend to have an inflationary effect. The proceeds of the advances pass into the investment market through the hands of the sellers of the stocks and shares, and become available for investment in new issues and so for the production of new capital equipment, etc. It was undoubtedly desirable in the circumstances obtaining in the United States in 1928-9 to keep this tendency in check. But that does not mean that it was desirable to carry credit restriction beyond the point at which inflationary bank advances were prevented, and to cause a serious setback to trade.

Productive activity in the United States reached a climax in June, 1929. From that point a decline set in, and by October the decline had become palpable enough to affect the calculations of the speculators. On the 24th October the collapse of the great speculation set in decisively.

Meanwhile in London, Bank rate had been raised successively to $5\frac{1}{2}$ per cent. on the 7th February, 1929, and $6\frac{1}{2}$ on the 26th September. In British industry there was no counterpart of the American productive activity. Depression still continued. But the country was losing gold. From £173 millions in the summer of 1928 the gold holding of the Bank of England had fallen to £150 millions in February, 1929. It recovered to £163 millions in June, only to fall to £132 millions at the end of September, 1929.

Gold Movements, 1920-8

To understand the gold position we must make a brief survey of the distribution of gold in the world. In the Appendix will be found a table showing the gold holdings of thirty-two countries,* at certain dates expressed in terms of American dollars of the old standard, the dollar being for this purpose a unit of *weight*, 23.22 grains of fine gold, making \$1,000 equal to $48\frac{3}{8}$ ounces.

At the earliest date chosen, 31st December, 1920, the

* Russia is omitted from the list, partly because her monetary system is quite isolated from that of the rest of the world, and partly because no reliable data are procurable as to the supplies of gold arising there. Gold estimated to be in circulation or hoarded or in banks other than Central Banks has been taken into account in the United States, France, Canada and Australia, but not in other countries. A number of small countries with gold holdings estimated at about \$250 millions and subject to unimportant variations have been omitted.

United States was the only country of the thirty-two remaining on the gold standard, and was receiving all the surplus gold of the world. In the period from then till 31st December, 1924, a beginning was made with the restoration of the gold standard, mainly among those countries of Eastern Europe which had suffered from complete monetary collapse. These countries did not attempt at that stage to accumulate metallic reserves, but were content with reserves of foreign exchange. Consequently in this period the absorption of gold by the United States continued uninterfered with by any considerable rival demand. The American gold holding rose from \$2,942 millions to \$4,507 millions, the increase of \$1,565 millions being just about equal to the addition made to the world's visible stock of monetary gold in the four years. This increase was approximately equal to the total output of new gold from the mines. But it is not to be inferred that nothing was left for the industrial demand and for India, for a large amount must have been collected from hoards in Europe and elsewhere.

The next period, from the end of 1924 to the end of 1928, saw a general return to the gold standard, which included all but six* of the thirty-two countries.

The Genoa plan, with its device for economizing gold, had been expressly recommended to guard against the competitive demands for the available supply of gold that might result from "the simultaneous efforts of a number of countries to secure metallic reserves." The Genoa plan had not been put into operation, but in this period up to 1928 the warning that had been given was observed. Most of the countries that resumed the gold

* Of these Roumania adhered to the gold standard in January, 1929, Yugoslavia in June, 1931, Japan in January, 1930, Peru in February, 1930. Uruguay was at gold parity in 1929. The remaining country of the six is Spain.

standard made arrangements for avoiding any great absorption of gold. The following are the increases that occurred (in \$ millions):

Germany	...	...	...	...	469
France	...	...	...	...	294
Argentina	...	...	...	...	163
Brazil	...	...	...	...	95
Belgium	...	...	...	...	73
Poland	...	...	...	...	50
Italy	...	...	...	...	48
Hungary	...	...	...	...	28
Austria	...	...	...	...	22
Colombia	...	...	...	...	17
India	...	...	...	...	15
Java	...	...	...	...	14
Uruguay	...	...	...	...	11
Others	...	...	...	...	29
					<u>1,328</u>

The decreases were:

United States	...	...	...	...	365
Japan	...	...	...	...	45
Netherlands	...	...	...	...	28
Chile	...	...	...	...	27
Canada	...	...	...	...	18
South Africa	...	...	...	...	14
Denmark	...	...	...	...	10
Others	...	...	...	...	12
					<u>519</u>

The biggest increase is shown by Germany. Germany

was extremely short of gold in 1924, and even after this increase her holding of \$650 millions in December, 1928, compares with an estimate of \$995 millions (in reserve and circulation) in 1913. The Dawes Committee, reporting in 1924, had recommended that the Reichsbank should be free to hold its monetary reserves entirely in foreign exchange. But the Organization Committee (Sir R. Kindersley and Dr. Schacht) revised this recommendation, requiring three-fourths of the reserve (which was to be 40 per cent. of the note issue) to be held in gold. Even with that requirement in force, Germany could have done with less gold. The Reichsbank held only \$37,000,000 of foreign exchange eligible for reserve at the end of 1928 (compared with \$60,000,000 at the end of 1924, or \$124 millions at the end of 1926), so that of a total reserve of \$687 millions nearly 95 per cent. was held in gold. The note issue at that time was 4,930 millions of marks. The statutory reserve required was therefore 1,972 millions of marks, of which 1,479 millions or \$342 millions had to be gold. Hungary, like Germany, though on a smaller scale, had been substituting metallic reserves for foreign exchange.

Argentina and Brazil, which between them took \$258 millions of gold, and held \$756 millions at the end of 1928, made no provision for supplementing their metallic reserves with foreign exchange.

But practically all the other countries which participated in the general return to the gold standard in the years 1924-8 took steps to avoid any undue encroachment on the world's stock of gold. The total absorption of the four countries named was \$755 millions. That of all the rest was \$573 millions.

The following table, showing in millions of dollars the increase in the holdings of foreign exchange as

monetary reserves in ten countries, goes far to explain how the scramble for gold was avoided.

		Foreign Exchange held:		
		Dec. 1924	Dec. 1928	Increase
Austria	...	48.8	88.5	39.7
Belgium	...	5.8	78.8	73.0
Czechoslovakia	...	21.8	74.4	52.6
Italy	...	30.2	316.8	286.6
Netherlands	...	45.0	88.4	43.4
Poland	...	49.0	59.1	10.1
Sweden	...	36.4	57.6	21.2
Switzerland	...	37.2	49.0	11.8
Colombia	...	15.8	38.6	22.8
South Africa	...	12.6	38.4	25.8
		<u>302.6</u>	<u>889.6</u>	<u>587.0</u>

The French Monetary Reform, 1926-8

France was a special case. The amount of gold she took, \$294 millions, was considerable, but to understand her position a more detailed explanation of the circumstances is essential. France had recently returned to the gold standard. *De facto* stabilization had been achieved in December, 1926, with the franc at about one-fifth of the old gold parity, and the new monetary law confirming the position and establishing a gold bullion standard was passed in June, 1928.

Inflation always leaves a country short of currency. The depreciation of the unit outstrips the increase in the circulation. In France there had been some recovery from the depreciation of July, 1926, but the total note circulation of 53 milliards outstanding in December, 1926, was still, if valued at the new parity, far below

normal requirements. In 1914 the monetary circulation (coin and notes) had been about 11 milliards. But that did not mean that with the new franc 55 milliards would be enough. For the world price level was 40 per cent. higher than in 1914. For the moment the French internal price level was relatively much lower. The index of weekly wages in October, 1927, was 593, equivalent to 120 in terms of gold (100 in 1910). As the internal price level rose, and economic conditions generally adapted themselves to the new monetary settlement, it might reasonably be anticipated that a monetary circulation of 70 to 80 milliards would become necessary. In June, 1928, the note issue was still no more than 58 $\frac{3}{4}$ milliards.

In 1914 France had contained something like 8 milliards (\$1,600 millions) of monetary gold, of which rather less than half was in the reserve of the Bank of France and the rest was in the form of gold coin in circulation. At the end of 1926, when the preliminary period of *de facto* stabilization of the franc began, the Bank of France held \$800 millions (including \$90,000,000 pledged as part security for the Bank's war-time debt to the Bank of England). There was a remnant (estimated at \$178 millions) still hoarded by the people. The total was thus only \$978 millions.

By the standards of 1914 the country was short both of currency and of gold. In order to appreciate the part that France has played in the breakdown of the gold standard, we must trace the process by which both these deficiencies were made good.

At the outset the Government proceeded to repay the advances it had received from the Bank of France. This made a gap in the Bank's assets, a gap that had to be filled, for otherwise there would have been an equivalent

gap in its liabilities, or in other words in the note issue which constituted the country's supply of currency.

The Bank of France is narrowly circumscribed in regard to the character of its assets. Apart from any exceptional powers, it can only invest in bills of exchange conforming to certain strict conditions, and in advances upon gilt-edged securities on which the practice is to charge substantially higher rates. The supply of these assets is never very elastic. The transactions of the type that give rise to the bills are not easily expanded. The great French banks are accustomed to rely on their holdings of bills eligible for rediscount as their principal liquid resource, and are reluctant to reduce them. Consequently when a gap has to be filled in the assets of the Bank of France it is apt to be found that gold is the *only* asset with which it can be filled.

In 1926, however, exceptional powers were taken. The Bank was enabled to buy foreign exchange, that is to say, bills and deposits at foreign centres (mainly London and New York). During the period of *de facto* stabilization the Bank used this power to keep the franc at its new parity, buying and selling dollars and pounds at the appropriate rates. This was an application of the gold exchange standard. The result was the accumulation of a reserve of foreign exchange. In virtue of the Bank's offer to create francs in exchange for dollars and pounds, the reserve of foreign exchange so acquired filled the gap in its assets.

The gap was a big one. By June 1928 the Bank held $26\frac{1}{2}$ milliards (\$1,040 millions) of foreign exchange and had acquired $8\frac{1}{2}$ milliards of additional gold (of which $1\frac{1}{2}$ had been collected from hoards in France).

The power of buying foreign exchange was then withdrawn, but the Bank had already bought exchange

forward on a very large scale and retained a great part of this as it matured and came into its hands. The result was that by the end of 1928 the Bank held $32\frac{1}{2}$ milliards (\$1,270 millions) of foreign exchange, and, though its note issue had expanded to 64 milliards, had made little further addition to its gold.

The French Absorption of Gold, 1929-31

This vast accumulation of foreign exchange in the two years 1927-8 was felt in both London and New York as a demand for bills. It tended to lower discount rates and to bring about a relaxation of credit. More than once Bank rate became ineffective in the London market. The American policy of easy credit was reinforced, and was enabled to prevail.

But at the beginning of 1929 the Bank of France reversed its policy. It started reducing its holding of foreign exchange, and brought it down to the amount of $26\frac{1}{2}$ milliards at which it had stood in June, 1928. A gap in the Bank's assets once again had to be filled, and at a time when the note issue was still far short of normal.

In the year 1929 the gold in the Bank of France increased by 9.8 milliards or \$385 millions, of which only \$14,000,000 came from hoards inside France. The \$371 millions acquired from outside France was little short of the entire output of the mines for the year, and exceeded the part of that output available for monetary purposes.

But that was not the end. In the period up to May, 1931, when the financial crisis broke out with the failure of the Austrian Credit Anstalt, the note issue and deposits of the Bank of France were expanding, and a further \$539 millions of gold was acquired. The total

absorbed in two years and five months was thus \$910 millions.

It has sometimes been maintained that the French absorption of gold was due to the creditor position of the country, as the recipient of the major part of the German Reparation payments. Undeniably that facilitated the acquisition of gold. But the gold was used for one purpose and one purpose only, as backing for the liabilities of the Bank of France. When France's creditor position or favourable balance of payments or any other circumstance led the French people to require a larger note circulation, or led to bigger deposits being held at the Bank of France, then to that extent more backing was needed. Whether the backing took the form of gold depended upon the powers and the practice of the Bank in regard to the acquisition of alternative assets. If the Bank had been enabled to acquire some other form of backing (for example, French Government securities), its need for gold would have been correspondingly diminished. By such means the absorption of gold could have been diminished to an indefinite extent. It was the absence of such power that must be regarded as the real cause of the absorption of gold on so colossal a scale.

The Onset of Depression

Here was the cause, at any rate the principal cause, of the loss of gold suffered by the Bank of England in 1929. When British industry was still struggling, entangled in a relentless depression, when American industry was already visibly reacting from its recent prosperity, Bank rate was put up to $6\frac{1}{2}$ per cent.

It may perhaps be argued that the loss of gold did not

necessitate any such measure. The Bank of England had recently been given the power to obtain from the Treasury a temporary extension of its fiduciary issue, and it would have been possible to release additional gold from the reserve by that procedure.*

However that may be, the decision was to raise Bank rate. The New York rediscount rate had gone up to 6 per cent. in August.

At this critical stage the effect of credit stringency was greatly intensified by the psychological consequences of the American stock market collapse. By the middle of November, 1929, the prices of stocks and shares had fallen by an average of something like 40 per cent. from the level reached in September. It should never be forgotten that the real subject-matter of monetary theory, as of all branches of economics, is human behaviour. Economic forces, such as credit restriction, work through the human mind. If a high Bank rate has its due effect, that is because it works as a *motive*, it is a deterrent upon borrowing and therefore upon enterprise.

I have already pointed out how a Bank rate that counts as moderate or even low at a time of activity is to be regarded as high at a time of depression. That is because at a time of depression enterprise is far more easily discouraged.

A depression psychology had prevailed in England ever since 1921. The Wall Street crisis precipitated a depression psychology with sensational suddenness among the millions of people who had lost fortunes in America. That was so even though the losses in many cases were "paper" losses.

The setback in trade in the United States, which had already begun in the summer before the crisis, gained

* See my *Art of Central Banking*, pp. 235-40.

impetus. Bank rates were gradually reduced but all too slowly. They did not fall below 4 per cent. either in New York or in London till March, 1930. Once again the brake was being kept on while going uphill. By the time rates were reduced to 3 per cent. at the beginning of May, 1930, it had become evident that "cheap money" by itself would not be enough to start a revival.

On previous occasions the Federal Reserve Banks, when they wished to promote a credit expansion, had accompanied the reduction of their rediscount rates with extensive purchases of securities in the open market. This had the effect of increasing deposits, and of reducing the pressure for rediscounts. Since deposits at the Federal Reserve Banks are "reserves" from the standpoint of the member banks, the result was that the member banks became more willing lenders. This policy had been pursued with excellent effect in 1922, in 1924, and in 1927. And in 1930 it was again resorted to for a time. But after June, 1930, it was dropped.

From then onwards no active steps were taken to promote credit expansion at any centre. The depression was left to work itself out. Under such conditions trade gets into a vicious circle. Because demand shrinks, production falls off. Because production falls off, banks are called upon to lend less, the consumers' income contracts, and demand shrinks still further.*

To each country the situation presents itself in the guise of a fall in the world price level, or in other words a rise in the wealth-value of gold. It must respond by curtailing its own consumer's income and outlay. Otherwise its purchases of imported goods at the low world price level will be increased, while its exporting power at

* For a fuller treatment of the "Vicious circle of Depression," see my *Capital and Employment*, pp. 69-87, and *A Century of Bank Rate*, pp. 61-3.

diminished prices and undiminished costs will fall off. There will result an excess of imports and an outflow of gold.

There must be a contraction of credit. Under the conditions assumed this would be *already* proceeding, without any active interference from the Central Bank. Only if the contraction of credit does not proceed fast enough will the country lose gold. In that case a slight pressure from the Central Bank, acting on the pessimism of the market, will readily reinforce the contraction to the required extent.

Depression and the Wage Level

The fall in the world price level is the outward sign of the fall in the consumers' income and outlay throughout the world. When demand shrinks, the effect is felt partly in a reduction of output and partly in a fall of prices. The two are alternatives. If prices fell in proportion to demand, there would be no reduction of output. If output were reduced in proportion to demand, there would be no fall of prices.

So long as wages and other costs remain undiminished in terms of money, a fall of prices has to be met out of profits. Any considerable fall will in many cases wipe out profits and encroach on the margin for overhead costs. Manufacturers are reluctant to let their plant be under-employed, and will meet a falling off of demand by price concessions. But the extent of the price concessions they are willing or able to make depends upon their pre-existing profit margins. If they cannot make adequate price concessions, they must curtail output, and unemployment supervenes. Theoretically unemployment is the signal for wage reductions. But wage

reductions are not always practicable, and are likely in any case to lag far behind the fall in prices.

When a world-wide trade depression is in progress, different countries will react to it in different ways. In some industrial countries where wages are relatively low, producers will make large price concessions and will continue active at the cost of a loss of profits. In others wages can be promptly cut down, and here also active production is made possible by price concessions. But in others again wages are relatively high and resist reduction. Only very limited price concessions are possible, and the result is that a disproportionate share of the total loss of business devolves upon these countries.

When world trade conditions are normal, and producers generally are fully employed, a country with low wages has very little advantage over its competitors. Its producers sell at world prices, and secure excessive profits at the expense of their workmen. So long as they are fully employed they have no motive for selling below world prices, and even if they do, they do not encroach on their competitors' business as long as they do not sell increased quantities.

But when world trade is depressed, the producers with low costs are in a position to undersell those with high costs, and to throw the major part of the burden of depression upon them.

Now Great Britain re-entered the gold standard in 1925 in a state of depression. For some years industry had been under-employed and profit margins had been low. This was not so in other industrial countries. The United States had been enjoying a period of prosperity which was the effect, and at the same time in some degree the cause, of an epoch-making improvement in the organization and technique of production.

The great European industrial countries had been through the inflation crisis that followed the war, and were in course of returning to the gold standard with devalued currencies. As we have seen, France adopted a new gold parity which made the level of French wages disproportionately low. To say that French wages in 1927 were 20 per cent. higher, in terms of gold, than before the war, while the increase in prices was 40 per cent., is to understate the discrepancy. In the interval since 1914 there had been enormous improvements in productivity. American industrial wages were 120 per cent. higher than before the war, British were 70 per cent. higher, German not much less. (German wages had started low in 1924 after stabilization, but had since increased.)

From 1927 to 1930 French wages rose steadily, but in October, 1930, the increase in weekly wages in terms of gold over the pre-war level was still not more than 50 per cent.

Gold Movements, 1928-31

In the years culminating with the crisis of 1929, Great Britain was in the unfortunate position of being the one country in which industry was depressed. Whenever there was an outflow of gold, and credit was contracted, the result was simply to deepen the depression.

In virtue of the international power of London as a financial centre, credit restriction in London was felt throughout the rest of the world. When Bank rate was raised, the effect was contraction not only in Great Britain but in a greater or less degree everywhere else. That placed British producers at a disadvantage in competition with foreign producers who had lower costs.

Instead of the high Bank rate making the balance of payments more favourable, it actually made it less so. It hastened the fall in the world price level, and increased the difficulty of maintaining the sales of British exports.

In 1929 this effect was to some extent masked in two ways. In the first place the *immediate* effect of a rise of short-term money rates in any centre above those prevailing elsewhere is to attract foreign money for temporary investment. While this is occurring, the effect on the balance of payments is favourable. The rise of Bank rate to $5\frac{1}{2}$ per cent. in February, 1929, attracted gold for a few weeks. The rise to $6\frac{1}{2}$ per cent. in September stopped an outflow, though it did not actually reverse it.

Secondly, the effect of credit restriction on producers is only felt after an interval. So long as existing commitments are being worked through, there is no diminution of activity.

Thus the dear money policy of 1929 was destined to bear fruit in 1930. The catastrophic fall in the world price level that occurred was the cause of the breakdown of the gold standard.*

In 1930 Great Britain was no longer in the position of the one country suffering from depression in a world of industrial activity. Depression was rapidly gathering way in other countries, particularly in the United States and Germany. Even so, however, the pre-existing depression was a source of weakness in the British position, notably in comparison with the United States. American industry, starting from a condition of prosperity and big profit margins, could sustain a greater reduction in prices than British. The consumers' income

* For a more detailed examination of Bank rate policy see *Trade Depression and the Way Out*, pp. 25-34; *A Century of Bank Rate*, pp. 134-43; *The Art of Central Banking*, pp. 213-16 and 232-5.

was more rapidly compressed in America under the influence of depression, and that made the foreign exchange position of the country favourable. In fact, the American absorption of gold was second only to the French, and far exceeded that of any other country.

Reference to the table in the Appendix will show the following increases and decreases in gold holdings between December, 1928, and May, 1931, the month in which the financial crisis began with the failure of the Credit Anstalt.

	Increases			\$ Millions
France	910
United States	656
Belgium	76
India	23
Switzerland	21
Italy	14
Czechoslovakia	12
Other countries	22
				<u>1,734</u>

	Decreases			\$ Millions
Argentina	245
Brazil	149
Australia	149
Japan	119
Germany	81
Spain	26
Java	22
Canada	21
Great Britain	15
Hungary	15
Colombia	14

	Decreases	\$ Millions
Uruguay	10
Other countries	16
		<hr/>
		882
		<hr/>

Three countries absorbed \$1,642 millions, and five lost \$743 millions.

The three heaviest losers had actually abandoned the gold standard, Argentina and Brazil before the end of 1929, Australia early in 1930. They were new countries, still needing a continuous import of capital for their further development, and having to transmit considerable sums in payment of interest and dividends to investors in Great Britain, Europe and the United States. And their production took the form mainly of natural products, the export of which they depended on to meet their obligations.

Natural Products and Manufactured Products

In these respects they were especially susceptible to the trade depression. The shrinkage of consumers' income and outlay all over the world meant a decline of demand for products of all kinds. In the case of industrial countries the decline of demand was met partly by a reduction of prices and partly by a reduction of output. The reduction of prices meant a more than proportional curtailment of profits. And since profits are the principal source of savings, the fund out of which the export of capital from the industrial countries to the new countries comes was to a great extent dried up.

At the same time the reduction of industrial output meant a reduced demand for materials. Had it been possible for producers of materials to restrict output to

the same extent as the producers of finished products, the prices of the former need only have fallen in the same proportion as those of the latter. But the restriction of output of natural products is not easily accomplished. Whereas the manufacturer tends to produce only to the extent of the orders he receives, the agricultural producer usually seeks to make remunerative use of all his land.

If the demand for any particular crop shrinks, he will turn over land to some other crop which promises better prospects. But in face of a *general* shrinkage of demand for natural products he is helpless. Indeed he sometimes actually *increases* his productive efforts in the hope of making up in quantity for a decline in price. Restriction of output only occurs through a curtailment of expenses (e.g. on fertilizers) and through some producers eventually being altogether ruined or giving up business. Restriction may be imposed by concerted action or by governmental authority. But that is not always practicable, and in any case is only resorted to at a relatively late stage.

Thus a regular feature of any severe trade depression is a great apparent "over-production" of natural products, accompanied by a catastrophic fall of prices. A new country is more severely affected both through this fall of prices and through diminished imports of capital. It has to effect a proportionally greater reduction in its consumers' income than an industrial country. That is why some of the new countries were driven off the gold standard in an early stage of the depression.

The industrial countries had to suffer in unemployment for the maintenance of the prices of their principal products at a relatively high level. By February, 1931, the number of unemployed had reached $2\frac{3}{4}$ millions in

Great Britain, 7 millions in the United States, 5 millions in Germany.

The German Position

Germany was exposed in one respect to the same kind of disadvantages as a "new" country. Since the war and the post-war inflation she had been an importer of capital on a huge scale, and like the new countries she had to adapt her economic system to a sudden cessation of the import of capital.

Germany and Eastern Europe had been almost denuded of working capital by the inflation. To manufacturers inflation appears as an insatiable increase in demand. They find themselves full up with forward orders for goods at apparently very high prices, and then in the end, when they deliver the goods and receive the money, the money evaporates, and they find that their working capital has vanished.

The collapse of the currency, it is true, means a collapse of bank deposits, and it might be expected that when the inflation is a thing of the past there would be a growth of deposits which would put the banks in a position to finance the reconstitution of the necessary working capital by means of the corresponding bills and advances. But in Germany and Eastern Europe the distrust of money and of pecuniary assets was such that bank deposits grew very slowly.

The following are the totals of German bank deposits (exclusive of inter-bank deposits) in millions of marks:

31st December, 1925	...	...	4,378
31st December, 1926	...	...	5,689
31st December, 1927	...	...	7,406
31st December, 1928	...	...	9,697

31st December, 1929	...	...	10,965
31st December, 1930	...	...	9,813

The shortage in the early years is startling and fully explains the prevalence of inordinately high rates of short-term interest and discount. The banks could not increase their advances faster than their deposits without endangering the gold standard. Industrialists in urgent need of working capital were willing to pay very high rates for advances, and the result was to attract enormous amounts of foreign money, American and British, Dutch and Swiss, French and Belgian. The apparent recovery of the bank deposits in 1928 and 1929 was largely due to the inclusion of a great part of this foreign money. The German banks acted as intermediaries, taking deposits at liberal rates of interest from foreign lenders and using the resources so acquired to make advances to German industry.

A similar situation arose all over Eastern Europe.

These deposits obtained from foreigners were expressed as payable not in marks, but in foreign currency units. At the same time German imports were being financed from abroad by bills drawn on acceptance credits set up in London and New York. This was a reversion to pre-war practice, except that the entry of New York into the business was new. The bills were drawn in pounds or dollars and the liability of the traders for whose account they were drawn was likewise in pounds or dollars.

Thus the German business community had assumed a gigantic floating liability payable in foreign currencies. So long as both the German currency and the foreign currencies concerned remained on the gold standard, it made little difference whether the liabilities were

reckoned in German currency or foreign. In either case, if the foreign money was withdrawn in amounts beyond what the foreign exchange market could absorb, it would have to go in the form of gold. But if the resources of the Reichsbank in gold and foreign exchange were completely exhausted, the gold standard would have to be suspended and a vital difference would thereupon arise. The Reichsbank could go on advancing German currency to enable the German banks to pay all deposits expressed in that currency, whether due to foreigners or to Germans. The currency might be depreciated, but that would not interfere with the process of payment. On the other hand, once the country's stock of gold and foreign exchange was completely exhausted, the payment of liabilities expressed in foreign currencies would have to be suspended. That would be an act of bankruptcy, and, when the principal credit institutions of the country were involved, it would necessitate something in the nature of a moratorium.

So long as the creditors retained confidence both in the solvency of the debtors and *also* in the continued maintenance of the gold standard, everything would go smoothly. As in the case of ordinary banking business, there would be continual repayments of debts which would be wholly or partly compensated by the creation of new debts. The fluctuations in the total would be gradual and therefore manageable under the influence of the ordinary market variations of the short-term rates of interest and of rates of exchange.

Even before the crisis of 1931 there were occasional signs that the foreign short-term money in Germany was insecure. The loss of gold, amounting to \$81,000,000, between December, 1928, and May, 1931, was the net result of big fluctuations. In the spring of 1929, when

the Young Committee on Reparations was sitting, Germany suffered a loss of \$230 millions, which was said at the time to be due to the withdrawal of French and Belgian balances. The actual gold movements were as follows:

Gain (+), or Loss (—), of Gold, February–May 1929				
				\$ Millions
Germany	...	...	...	– 230
United States	...	...	...	+ 148
France	...	...	...	+ 101
England	...	...	...	+ 59
Argentina	...	...	...	– 39
Belgium	...	...	...	+ 8

This was the period of dear money in England and America (Bank rate having been raised to $5\frac{1}{2}$ per cent. in February). That may well have been the cause, quite as much as any move on the part of French and Belgian creditors. In April, 1929, Germany raised her Bank rate from $6\frac{1}{2}$ to $7\frac{1}{2}$ per cent., and she had no more trouble with gold till after the General Election of 14th September, 1930.

In the intervening period the Wall Street crash had occurred, and the general régime of depression and cheap money had ensued. Germany had regained \$200 millions of the gold lost, and had reduced her Bank rate to 4 per cent. That was substantially above the rates in London, New York, Paris, Amsterdam and Switzerland, but in the peculiar conditions of German credit and banking it is to be reckoned as a low rate.

The election of September, 1930, yielding unexpectedly great gains to the parties of unrest, the National Socialists and Communists, gave a great shock to confidence, and an outflow of gold occurred, reducing the

reserve by \$105 millions in a few weeks. Bank rate was raised to 5 per cent., and there followed an uneasy interval of pending crisis. An addition of \$50,000,000 to the gold reserve between November, 1930, and May, 1931, came mainly from Russia, and was no evidence of returning confidence. The Reichsbank's reserves of foreign exchange recovered at the end of 1930, only to melt away again at the beginning of 1931.

In May, 1931, the insolvency of the Austrian Credit Anstalt was suddenly disclosed. The depression had crushed the industrial concerns in Austria and neighbouring countries to which that bank had made advances, and it was compelled to stop payment. The direct losses were large, but the importance of the failure lay in its significance as a symptom. The ominous parallel with the far greater credit structure of Germany sent a terrible spasm of panic through the financial centres of the world. Advances to German banks and industrialists began to be called in on a colossal scale. In the month of June Germany lost a milliard of marks (\$238 millions) in gold. Substantial credits also were granted to the Reichsbank by foreign Central Banks. On the 13th July the crisis culminated in the failure of the Darmstädter Bank and the temporary closing of all the German banks.

For the time being the German foreign exchange market ceased working. Nor could it revive unless some arrangement were made to prevent the withdrawal of the remaining foreign advances.

This was the form that the breakdown took in its early stages. It had arisen only indirectly from the strain caused by the appreciation of gold. The trade depression and the fall of prices caused the failure of the Credit Anstalt, and the fear of the same thing happening in Germany led to the withdrawal of foreign

advances, which was the immediate cause of the crisis. When the foreign creditors arrived at an agreement to leave their money for a stated period in Germany, the foreign exchange market resumed working, but only under rigid control.

The Collapse of the Gold Standard in Great Britain

In the case of Great Britain premonitory symptoms of a doubt as to the continuance of the gold standard appeared in February, 1931. Forward quotations of the foreign exchanges (on Paris, for example) fell below the gold export points. People were undertaking to buy francs in three months at a price which would exceed the cost of shipping gold from London. They were in fact paying a premium of insurance (though not a very large one) against the suspension of the gold standard within three months.

This misgiving was the outcome of doubt whether the country could or would make the efforts required to maintain the gold standard. There was no prospect of wage reductions, and yet without them there seemed every likelihood of the export trade dwindling almost to nothing. The budget situation was growing more and more formidable as business deteriorated; the yield of the revenue fell, and borrowing for the payment of unemployment benefit grew.

In March, however, France ceased for the time being to absorb gold, the foreign exchange situation improved, and the ominous symptom disappeared.

But when the German crisis broke out in the middle of July, a state of panic developed. If the enormous sums placed by English banks and accepting houses in Germany were to be indefinitely locked up, it was feared

that their liquidity would be endangered, and that the international strength of London would be impaired. London was both a creditor and a debtor in international markets on a huge scale. If one large section of its credits became frozen, would its debts be secure?

Perhaps these fears were not very reasonable, and perhaps they would not have prevailed at all had there not been doubts whether after all the country could face the effort exacted from it by the gold standard. Continental nations had been familiar since the war with the situation of countries which have to devalue their currencies because the burden of indebtedness would otherwise be intolerable. Some countries had been compelled, after a short experience of a new gold parity, to devalue still further.

In the latter half of July, 1931, foreign money was withdrawn from London to an enormous amount. The Bank of England lost over £30,000,000 of gold, and, as the withdrawals continued, an effort was made to safeguard the remaining gold by raising credits in New York and Paris (first £50,000,000, and then a further £80,000,000).

With the political events of August and September it is not necessary to deal. It is enough to say that energetic measures for balancing the budget did not prevent the continuance of the withdrawal of foreign money, and on the 21st September, the credits having been practically exhausted, the Bank of England was relieved from its legal obligation to sell gold at the coinage price.

From the standpoint of monetary legislation it is interesting to observe that there was no suspension of "payments." The restriction of cash payments in 1797 may be regarded as a "default," in that the Bank of England note represented nothing but a debt and the

Bank ceased to pay the debt. But the Gold Standard Act of 1925 merely required the Bank to "sell" gold bullion at the coinage price. Far from requiring it to "pay" in gold coin, it actually relieved the Bank of the statutory obligation (imposed on it by the Currency and Bank Notes Act, 1914) to convert the currency notes issued by the Treasury into gold coin on demand. That obligation had nominally remained in operation up to 1925, but it had not sufficed to preserve the gold standard, because the melting of gold coin had been prohibited since 1916, and the export of gold since 1919. The restoration of *freedom of export* was the essence of the return to the gold standard in 1925.

The Currency and Bank Notes Act, 1928, substituted Bank of England notes of £1 and 10s. for the currency notes under the Act of 1914 (see p. 8). These Bank of England notes bear the words "I promise to pay," but legally they are not promises to pay; like the currency notes, they are simply *money*. They are legal tender in payments by the Bank of England, whereas notes of higher denomination are not.

The link between the pound sterling and gold was the obligation of the Bank of England to sell gold at £3 17s. 10½d. a standard ounce (£4 4s. 11⅕d. a fine ounce). The Gold Standard Amendment Act, passed on the 21st September, 1931, severed this link. It is sometimes supposed that there is some inherent dependence of the pound upon gold, as if a sterling debt were essentially an obligation to deliver gold. Had that been so, the suspension of the Bank's statutory obligation to sell gold would have made no difference. Nothing was done to relieve any debtor of any pre-existing obligation.

The cause of the failure of the gold standard was simple. It was the appreciation of gold in terms of

wealth. Gold had not supplied a stable unit for the measurement of values. A deplorably apt example was afforded of the need for some measure of stabilization such as is discussed above in Chapter IV.

The extent of the fall of prices is illustrated by the following table:

Wholesale Price Index Numbers

<i>British Board of Trade</i> *—			September		June
			1925	1929	1931
General Wholesale					1932
Index	...	...	95.7	82.1	59.7
Manufactured Ex-					58.9
ports	...	...	98.3	84.8	71.9
					68.7
<i>United States (Bureau of Labour)</i> †—			September		June
General Wholesale					1932
Index	...	...	103.5	95.3	71.2
Finished Products	...	...	100.6	94.5	75.9
Raw Materials	...	...	106.7	97.5	62.7
Farm Products	...	...	109.8	104.9	60.5

* 100 in 1924.

† 100 in 1926.

Between 1929 and September, 1931, the British general index fell 27 per cent. and the American 25 per cent. But these figures give an inadequate idea of the magnitude of the dislocation. It has been explained above how the fall in the prices of manufactured products is checked at the cost of a decline of output. British manufactured exports fell only 15 per cent. And the American statistics show declines of no less than 36 per cent. in raw materials and 42 per cent. in farm products.

Here we have a striking illustration of the extent of the disparities of price levels arising from an excessive deflation. And it is the raw materials and farm products, classes which do not meet a shrinkage of demand by a

reduction of output, that supply the best measure of the appreciation of gold. Tested by them, the value of gold may be said to have appreciated by 60 to 70 per cent.* The index number of prices in world markets in terms of gold, which is compiled by the League of Nations from international trade statistics, fell from 100 in 1929 to 68 in the third quarter of 1931. The statistics on which the index is based include products of all kinds, though no doubt finished goods are somewhat under-represented. In the fourth quarter of 1931, when the prices of British manufactures and of those of other countries that had suspended the gold standard suddenly fell in terms of gold, the index dropped to 58.

The *immediate* cause of the crisis, it is true, was the withdrawal of foreign money, first from Austria and Germany and then from England. But that was the result of distrust, and the distrust was directly due to the appreciation of gold.

It was the fall of prices that caused the bank failures in Austria and Germany by making industrial concerns insolvent. And it must be borne in mind that these industrial concerns gained no relief from the circumstance that they were selling their output at the relatively higher prices appropriate to finished products. They were disastrously under-employed just because they could not afford to accept orders at lower prices.

It was the same fall of prices that had caused in Great Britain the unemployment, the shrinkage of exports and the budget deficits, which led foreign creditors to fear a lapse from gold parity and to withdraw their money while they could still do so without loss.

* If prices fall in the proportion of 100 to 64, gold appreciates in the proportion of 64 to 100, or 100 to 156 $\frac{1}{4}$. If prices fall in the proportion of 100 to 58, gold appreciates in the proportion of 58 to 100, or 100 to 172 $\frac{1}{2}$.

Behind the fall of prices there was the contraction of demand, corresponding to a fall in consumers' income. In the case of the United States, the national income in 1929 was estimated at \$81,000 millions, and in 1931 at \$53,800 millions. The German national income fell from 76 milliards of marks in 1929 to 57 milliards in 1931. That of the United Kingdom may be put at £3,800 millions in 1929 and £3,300 millions in 1931.*

The contraction of the national income in each case is the resultant of a fall of prices and a decline of production. If output falls 20 per cent. and prices fall 20 per cent., the consumers' income falls 36 per cent. (for 80 per cent. of 80 per cent. is 64 per cent.).

These figures afford some indication of the collapse of demand for products of all kinds in world markets, to which the economic system of any country endeavouring to maintain gold parity in 1931 had to accommodate itself.

The Responsibility of Central Banks

The subject of this book is the Gold Standard, and we are not concerned from any wider standpoint with the causation of the economic crisis. The view is often put forward that the crisis arose from economic causes outside the monetary sphere, from "over-production," for example, in some sense, or from unbalanced industrial development, or from misdirected investment. I have sought to show, in my *Trade Depression and the Way Out*, that such causes, if they are to account for the phenomena of depression, must act through money.

* I have based these estimates on those of Mr. Colin Clark in his *National Income and Outlay*, but I have ventured to amend his figures in one or two respects. In particular I have not followed him in reckoning the proceeds of indirect taxation twice over.

They must, in fact, set in train the vicious circle of deflation, and so cause a compression of the consumers' income and an appreciation of the monetary unit.

But for our present purposes we can leave these controversies on one side. For, even if there were non-monetary causes at work in 1929 and 1930, which were tending to produce a violent compression of the consumers' income and collapse of demand, it remains true that the action of the great Central Banks at that time was independently tending to produce precisely that result. For the curtailment of the flow of money, the Central Banks, as the sole sources of money, must bear the responsibility. That responsibility is hardly less if they are shown to have used their power to reinforce disturbing causes which they might have counteracted, than if they themselves originated a disturbance in conditions otherwise calm.

The collapse of demand is another name for the appreciation of gold. It means the offer of less gold in exchange for commodities. And we may regard the responsibility of the Central Banks as arising from their control over the market for gold. If some of them absorb a disproportionate amount of gold, the others find themselves short of it, and between them they force its wealth-value up.

The responsibility of Central Banks for determining the wealth-value of gold had been recognized at the Genoa Conference, but by 1929 the Conference had been forgotten and the responsibility disclaimed. The Central Banks had reverted to the ideas of the nineteenth-century gold standard, which limited their responsibility to restraining the expansion of credit whenever it outran the available gold reserves. Here was an objective which made no demands on the reasoning faculty; it could be

treated as an article of faith. Under the conditions of the nineteenth century faith worked well enough, because the wealth-value of gold was fairly stable. Only in the severe depressions of 1876-9 and 1884-6 were there searchings of heart.

In face of the wild vagaries of the wealth-value of gold in the years following the war, faith was no longer enough. A man once set his dog to guard his clothes while he was bathing. Unfortunately the dog did not recognize his master naked, and guarded the clothes too faithfully. The man remained disconsolate and deflated; the dog barked and the caravan could not go on.

The crisis cannot be separated from the appreciation of gold. Great Britain and other countries left the gold standard because the wealth-value of a gold currency unit had become intolerably high. It was because the value of the unit was too high that suspension of the gold standard, involving a depreciation of the unit, brought relief. And if we ask, relief from *what*, the answer is precisely from those troubles with which the crisis is identified, from unemployment, budget deficits and the embarrassments of debtors.

CHAPTER VI

PETREAT AND SURRENDER OF THE GOLD STANDARD, 1931-8

Exchange Control

THE effects of the suspension of the gold standard by Great Britain were far-reaching and catastrophic. A number of other countries quickly followed suit, and by the end of 1931 they included Canada, India and nearly all the British Colonies, Egypt, Norway, Sweden, Denmark, Finland, Portugal and Japan. Argentina, Brazil, Uruguay, Australia, New Zealand and Mexico had taken the step before Great Britain.

Germany and the countries of Eastern Europe clung to gold parity, but in order to do so they resorted to rigid measures of exchange control and restriction of imports, which deprived the foreign exchanges of all significance.

Exchange control in this connection usually takes the form of a prohibition of dealings in foreign exchange at any other rate than that officially established, and the prohibition is enforced through such devices as a monopoly of dealings in foreign exchange being conferred on the Central Bank or on a consortium of commercial banks acting under control; compulsory surrender of the proceeds of sale of exports or possibly of all foreign exchange in the hands of any of the country's nationals; blocking of balances to the credit of foreigners in the country's banks; a rationing of the supply of foreign exchange to importers; a moratorium, partial or complete, on external payments, other than for imports.

Such measures, provided they are effectively enforced, can maintain parity in face of *any* disequilibrium. They had been extensively resorted to in the period of inflation from 1919 to 1924, but with very incomplete success. When inflation was raging in a country, and holders of its currency were in desperate fear of heavy losses, the inducement to evade exchange control was so pressing that illicit dealings soon constituted the real market. But in the conditions of 1931-2 exchange control had to deal not with the excesses of inflation, but merely with the lag of deflation in the country concerned behind the progress of deflation in the rest of the world. The profits of evasion were so modest that in many of the countries illicit dealings were hardly worth while.

Moreover administrative machinery, at any rate in Central and Eastern Europe, was far more efficient than in the years of demoralization that followed the war of 1914-18. On the whole, the enforcement of exchange control may be said to have become practicable.

The Gold Standard Group, 1931

The list of countries remaining *effectively* on the gold standard after the crisis of September, 1931, was a very short one. It was very soon practically confined to the United States, France, Switzerland, Holland and Belgium and their colonies. Italy managed to maintain her currency close to parity with exchange restrictions not of the most vexatious kind, but could hardly be reckoned as unequivocally within the group.

One of the first effects of the crisis was a panic-stricken withdrawal of balances by France and her neighbours from the United States. The Americans had even larger balances locked up in Germany than the

English. Their industrial depression, notwithstanding that they had started two years before from a state of prosperous activity, was at least as severe. And the situation was complicated there, as it had not been in England, by numerous bank failures. No less than 2,281 banks with deposits of \$1,519 millions had failed in the twenty months from January, 1930, to August, 1931, and in the two months of September and October the number was 827 with deposits of \$716 millions.

Despite the accumulation of gold in the United States, amounting in the middle of September, 1931, to \$5,015 millions, confidence was no longer felt that the gold standard would be maintained. To the directorates of Central Banks whose sterling holdings had suddenly depreciated, it seemed that anything was possible. The Belgian National Bank turned the whole of its foreign exchange reserves, amounting to \$114 millions, into gold. Between the 31st August, 1931, and the 31st October, the Netherlands Bank reduced its holding from \$92,000,000 to \$40,000,000, and the Swiss from \$109 millions to \$19,000,000. The Bank of France did not at that stage withdraw any very great part of its huge dollar assets, but the commercial banks in France and likewise in the other three countries liquidated theirs on an enormous scale. They exchanged them for currency in their own countries, or for deposits at the central banks, and both currency and deposits practically had to be backed by gold.

The following are the principal gains and losses of gold in the two months September and October (in \$ millions):

	Gains			
France	238
Switzerland	193

Belgium	...	...	...	...	136
Netherlands	...	...	...	...	76
Italy	...	...	...	...	10
					<u>653</u>

					Losses
United States	...	...	...	...	703
Japan	...	...	...	...	64
Germany	...	...	...	...	52
Argentina	...	...	...	...	39
					<u>858</u>

The discrepancy of \$205 millions between gains and losses is striking. Some gold was in transit at the end of October, but the greater part represents gold acquired by private individuals or by banks for purposes of hoarding.

Hoarding also set in in the United States, but it took the form of a hoarding of currency, not of gold. It was attributable to the bank failures, not that all the remaining banks were distrusted, but people found themselves in many places with no banks they could rely on or none at all within a convenient distance.

The effect of these panic-stricken movements was to intensify the deflation. In the United States the withdrawal of gold, combined with the expansion of the currency, entailed a big increase in the rediscounts of the Federal Reserve system. They rose from \$169 millions in July, 1931, to \$828 millions in January, 1932. The rediscount rate was raised in October, 1931, from $1\frac{1}{2}$ per cent. to $3\frac{1}{2}$ per cent.—not a high rate according to ordinary standards, but one which was then definitely intended to be deterrent.

Up to the outbreak of the financial crisis in May, 1931, the vicious circle of deflation had completely dominated the credit situation both in Europe and in America. Since June, 1930, when the purchases of securities in the open market by the Federal Reserve Banks had ceased, the Central Banks of the world had relied on no other resource for restoring normal conditions than extremely low bank rates. But it had become impossible to tempt traders to borrow more freely by any rates, however low.

When the crisis came, Bank rate was raised in London from $2\frac{1}{2}$ per cent. to $3\frac{1}{2}$ on the 23rd July, 1931, and to $4\frac{1}{2}$ on the 30th, but cheap money continued in Paris, Amsterdam, Brussels and Berne, and for the time being in New York. The rise of the New York rate to $3\frac{1}{2}$ per cent. in October was specially significant in that it meant that the Federal Reserve Banks were no longer trying to bring about a credit revival. They were aiming at *detering* borrowers rather than encouraging them. Any hope of breaking the vicious circle had to be definitely abandoned. The fall in the price level continued unabated. The number of unemployed continued to grow.

The Depreciation of the Pound, 1931-2

Gréat Britain, on the other hand, was liberated by the suspension of the gold standard from her previous dependence on the world value of gold. The pound became free to vary, and its value in terms of commodities was brought within the unfettered control of the British authorities themselves.

It may, perhaps, be objected that currency control depends nowadays on credit control, and credit control had been baffled in the period that culminated in the

crisis of 1931 by the vicious circle of deflation. It had been found impossible to induce traders to borrow by cheap money.

But for the moment the suspension of the gold standard *broke the vicious circle*. There was no longer any difficulty in inducing borrowers to come forward. The depreciation of the pound promised a reduction of the British manufacturers' costs in terms of gold. At the prices prevailing in world markets they could see their way to business which, if not remunerative according to the standards of normal times, would at any rate keep their works going, preserve their goodwill, and cover prime costs with some margin by way of a contribution to overhead expenses.

Such was the first impact of the departure from gold. There were seen in some industries an activity and an optimism such as had hardly been known since 1920. The flow of credit which, in conjunction with productive activity, generates incomes, was set in motion.

But one essential condition of the effective continuance of revival was that the pound should be allowed to depreciate to a sufficient extent to make industry remunerative.

We may well find some difficulty in deciding precisely what rate of depreciation of the pound would have secured equilibrium. A restoration of the price level of 1929 was sometimes recommended. But 1929 was a year of depression—so severe that at the General Election of May in that year unemployment was the one paramount issue. Even in 1925, as has already been mentioned, it had been argued that gold parity overvalued sterling, and the price level of 1929 was 14 per cent. below that of 1925 (whether measured by the wholesale index or by the index of British manufactured exports).

Improvements of productivity may be supposed to have corrected whatever disparity there was in 1925 between the world price level and the British wage level. Possibly they may have done more, so that a lower price level than that of 1925 would secure equilibrium. But as a first approximation the price level of 1925 will serve as a standard.

In September, 1931, the British wholesale index showed a drop of 37.6 per cent. since 1925. The drop, during the same period, of the price index of manufactured exports was no more than 26.8 per cent.

If the contention put forward above (pp. 137-8), that the price level of natural products is the best measure of the change in the purchasing power of the monetary unit, is correct, even the wholesale index, comprising as it does a certain proportion of manufactured products, understates the extent of the movement. The American index of raw materials discloses a fall of 41.2 per cent. between 1925 and September, 1931, and that of farm products a fall of 44.9 per cent.

It is a reasonable approximation to say that the equilibrium level for the pound sterling was at a depreciation of 40 per cent. below gold parity.

Whatever the equilibrium level of sterling would have been after September, 1931, the actual depreciation of the pound certainly did not attain to it. After some fluctuations in the first few days after the suspension of the gold standard the pound settled down at somewhere near 80 per cent. of parity, and for October and November it averaged 78 per cent. There occurred a sharp fall at the end of November, and a further period of two or three months at about 70 per cent. of parity followed.

But meanwhile the *gold* price level continued to fall relentlessly, so that 70 per cent. in March, 1932, was

little, if at all, nearer equilibrium than 80 per cent. in September, 1931. The price level of British manufactured exports in sterling actually decreased slightly. The wholesale index rose by about 8 per cent. in November, but fell again, and by the middle of 1932 was lower than in September, 1931. The number of unemployed showed no appreciable diminution and even, in the summer of 1932, some tendency to increase.

All that the suspension of the gold standard did was to delay somewhat the progress of the depression. That this was a great gain the following comparison of indexes of manufacturing production in Great Britain and other countries clearly show:

			Great Britain	United States	France	Germany
1928	...	...	100	100	100	100
1929	...	...	106.0	107.2	109.4	101.4
September, 1931	...	...	84.7	68.5	93.7	67.0
December, 1931	...	...	92.0	66.7	87.4	59.4
March, 1932	...	...	90.6	60.4	77.2	56.7
June, 1932	...	...	89.2	53.2	73.2	55.7

The British index showed on balance an increase since September, 1931, of 5 per cent., whereas the American fell in the same period by 22 per cent., the French by 22 per cent. and the German by 17 per cent.

Why was it that after the vicious circle of deflation had been broken, when the way had been clear to revival, so little was accomplished?

Bank Rate, 1931-2

Concurrently with the suspension of the gold standard, Bank rate was raised on the 21st September, 1931, to 6 per cent. It has been shown above that 5 per cent. is

to be counted a high rate, so high as to be quite inappropriate, according to pre-war practice, to a time of depression. A rate of 6 per cent. signifies a severely deterrent policy.

Perhaps in the first week or two something of the kind was needed to prevent too precipitate a depreciation of the pound. So long as the pound was rapidly falling, a high Bank rate would have little if any deterrent effect on enterprise, and it would be a signal to speculators that there were forces at work to restrain any tendency towards an indefinite depreciation of the currency. The fears expressed at the time, that the currency might collapse altogether like those of Central and Eastern Europe in the years 1919-23, were entirely without foundation. Such conditions as, according to the teachings of experience, would threaten collapse were entirely absent. But it would have been undesirable for the pound to fall below the equilibrium level, or to fluctuate at the outset more than was unavoidable.

And even after that stage Bank rate might have been a matter of secondary importance if the Bank had intervened to regulate the value of the pound *directly*. The Central Bank may encounter great difficulty in keeping *up* the currency unit. To maintain it at a value above the equilibrium level, it must so compress the consumers' income and outlay as to keep the demand for foreign trade products within bounds, and that will mean depression and unemployment. But the Central Bank need not have any difficulty in keeping the currency unit *down*. It can be given the power to create currency in unlimited quantities, and therewith to buy all foreign exchange offered at the appropriate rate.

Had the Bank of England sought to lower the value of the pound, it would have encountered no obstacle. It

could have offered pounds in the foreign exchange market in whatever quantity might be necessary to bring down their value to the required level. A high Bank rate would not have counteracted the process; had the rate tended to be deterrent, it would have immediately become ineffective.

But when the value of the pound was left to itself, the high Bank rate played a decisive part in tending to contract credit and to raise the pound.

There was one important influence in the contrary direction, in that it was necessary to accumulate a fund of foreign exchange to repay the French and American credits raised in August, 1931. A sum of £130 millions in francs and dollars had to be provided within twelve months. This operation meant selling pounds in the foreign exchange market, and in the opening months of 1932 the pound was thereby kept down to 70 per cent. of parity. But the purchases of foreign exchange were completed towards the end of March, 1932, and thereupon the pound leapt up to the level of the preceding November.

When the gold standard is suspended, the purchase and sale of gold or gold currencies by the Central Bank involves an exchange risk, and, in view of the scale of the transactions and the magnitude of possible fluctuations in the gold value of the currency, the risk may well be greater than the Central Bank's own resources can stand. In 1926, when the Bank of France was given the power to buy and sell gold and foreign exchange, the French Government assumed the risk. As the gold value of the franc doubled between July and December, 1926, the loss might have been considerable. But the Bank made comparatively little use of its powers till the future value of the franc had been practically settled.

So long as the Bank of England was accumulating francs and dollars to pay off the French and American credits that had been raised in August, 1931, the exchange risk was no impediment. Directly or indirectly the loss was in any case to be borne by the Government.

But when that operation was completed, the difficulty had to be faced, and provision was made in the Finance Act, which received the Royal Assent on the 16th June, 1932, for the purchase and sale of gold and foreign exchange to be carried out by the Bank through a Government fund, the Exchange Equalization Account, the gain or loss being on account of the Government and not of the Bank.

The 6 per cent. Bank rate lasted five months. The purchases of foreign exchange by the Bank of England during that period did but little to counteract its deterrent effect. The value of the pound was never nearly brought down to the equilibrium level, and at no stage was that prospect of expanding demand and rising prices, which had given so hopeful a tone to business immediately after the 21st September, revived.

By the 18th February, 1932, when Bank rate was reduced, the vicious circle of deflation had been once again joined, and it was as impossible as it had been a year before to induce traders to extend their borrowing by cheap money alone. The opportunity had been lost, deflation and falling prices prevailed in spite of the abandonment of gold, and the pound sterling had become a currency only one degree less intolerable than gold itself.

The transition to cheap money, when it came, was prompt. In four weeks the rate came down from 6 per cent. to $3\frac{1}{2}$ (17th March, 1932). Then by slower stages it was reduced to 2 (30th June). But it was too late.

Gold Movements, May, 1931, to March, 1932

Meanwhile important developments were occurring in the countries which still adhered to gold. I have referred above to the withdrawal of gold from the United States in September and October, 1931. The following table shows the principal increases and decreases in the gold holdings of the countries included in the Appendix between the end of May and the end of December, 1931 (in \$ millions):

Increases				
France	...	...	...	518
Switzerland	...	...	...	329
Netherlands	...	...	...	176
Belgium	...	...	...	153
Others	...	...	...	64
				<u>1,240</u>
Decreases				
United States	...	...	...	338
Germany	...	...	...	335
Japan	...	...	...	188
United Kingdom	...	...	...	147
Argentina	...	...	...	109
Spain	...	...	...	34
Australia	...	...	...	22
Others	...	...	...	33
				<u>1,206</u>

The big losses of the United States in September and October are partly concealed by gains both before and after those months.

The Bank of France had reduced its holding of for-

foreign exchange in the course of the seven months by \$90,000,000,* but the greater part of its increased gold was needed as backing for deposits representing the idle cash reserves of the French commercial banks.

From the beginning of 1932, however, there started a systematic liquidation of the foreign exchange holding. In the first three months, January to March, 1932, the Bank disposed of \$305 millions of foreign exchange and acquired \$313 millions of gold.

The loss of gold suffered by the United States in that period was limited to the moderate amount of \$70,000,000, because an unexpected supply was released from another direction. India has as a rule appeared as the source of a persistent non-monetary demand for gold (see above, pp. 47-8). This demand fluctuates, reaching a maximum when the world price level is high and India is prosperous. Any time of depression and low prices would see a big decline in the Indian demand for gold. But after the British suspension of the gold standard, since the rupee was kept at the pre-existing parity with the pound sterling, the attractions of a premium on gold combined with the pressure of an unparalleled depression to induce sales of gold, which had been hoarded in the form either of ornaments or of coin, on such a scale that India became an important exporter of gold. The net exports from India in the six months from October, 1931, to March, 1932, were equivalent to \$156 millions.

The increases and decreases in gold holdings in the three months January to March, 1932, are shown on the following page (in \$ millions).

* The apparent reduction was nearly 6 milliards, or \$240 millions, but allowance must be made for the sterling holding being written down by 2,342 millions, and for advances on the security of gold, mostly to the Bank of Spain, amounting to 1,266 millions.

Increases				
France	...	...	...	313
Switzerland	...	...	...	18
Others	...	...	...	11
				<hr/> 342 <hr/>

Decreases				
United States	...	...	...	70
Germany	...	...	...	25
Japan	...	...	...	20
Others	...	...	...	47
				<hr/> 162 <hr/>

Open Market Purchases in the United States, 1932

The Federal Reserve Bank of New York had raised its rediscount rate to $3\frac{1}{2}$ per cent. in October, 1931. The rate was reduced in February, 1932, to 3 per cent., but market rates were still being kept up. The view prevailing in France was that the cheap money policy had been a mistake (see the Report of the Bank of France for 1931), and the change of policy in the United States was generally regarded as due to French influence.

But opposition was developing in the United States. Even if it was true that cheap money had been a failure, that merely meant that it had failed to bring about an expansion of credit. Dear money was expressly designed to *prevent* an expansion of credit. Moreover ever since the war it had been the well-recognized practice to reinforce cheap money with open market purchases of securities whenever an expansion of credit was sought. Open market purchases had been tried in the first half of 1930, and had not stayed the progress of the depres-

sion. A small further instalment in July, 1931, had counted for nothing in face of the panic, the currency hoarding, and soon afterwards the vast outflow of gold.

But if cheap money had failed and open market purchases had failed, what was left to be done? There were ominous tendencies towards crude inflationism. Plans were put forward for prepaying the veterans' bonus (the capital sums awarded to those who served in the war, and payable only by instalments over a period of years) and providing the funds by a new issue of paper currency. Such measures were odious to orthodox financial opinion, though in reality the distinction between them and open market purchases of Government securities is a shadowy one. Paper currency in the United States, as in Great Britain, has become no more than a subsidiary means of payment, in comparison with bank credit. Inflation, to be effective, must work through bank credit. Redundant paper money does not stay in circulation, but is paid into the member banks and by them into the Federal Reserve Banks, where its only function is to be an additional asset giving rise to additional deposits, in exactly the same way as Government securities.

Nevertheless, these paper money plans were in one respect more dangerous than the open market purchases of securities. The Federal Reserve Banks could stop their purchases of securities at their discretion at any time, whereas an issue of paper money of a predetermined amount for an assigned purpose might turn out to be more than was required or justified.

It was becoming clear that inflation in some form was the only remedy for the depression. Rather than leave an opening to crude inflationism, conservative financial opinion brought support to the group which advocated

inflation in a limited and technically manageable form, that is to say, open market purchases to whatever extent might be necessary to correct the deflation that had occurred since 1929, and to raise the price level to what it had been in that year. That is the policy that has come to be known as "reflation." It was recognized that it might involve a renewed loss of gold, and legislation was passed at the end of February, 1932 (the Glass-Steagall Act) enabling the Federal Reserve Banks to include Government securities in the cover for their note issues.*

Thereupon the Federal Reserve Banks embarked at once on a programme of open market purchases. Up to the beginning of April they bought about \$20,000,000 a week. Then they increased their purchases to \$100 millions a week. At the end of June, 1932, when the pace slackened, their holding of Government securities had reached \$1,746 millions, as compared with \$741 millions at the end of February.

Gold Movements, April-June, 1932

Here were heroic measures. Nevertheless, up to the end of June there appeared to be no effect whatever on trade and industry. Prices and output had continued to fall, and the depression was deeper than ever.

Rediscounts had stood in February at the relatively high level of \$848 millions. They had been reduced by May to \$486 millions, and the reserve balances of the member banks had begun to grow. The rediscount rate had become ineffective and market rates had fallen very low. The bank acceptances held by the Federal Reserve

* They already had the power to hold Government securities against their *deposits*, but only gold, commercial paper and acceptances against their *notes*.

Banks had fallen from \$151 millions in February to \$41,000,000 in May, and the market rate for three months' bills was below 1 per cent.

In May and June, however, the rediscounts were no further diminished and the reserve balances no further increased. Progress was interrupted because the purchases of securities *were offset by sales of gold*. The Federal Reserve Banks were making no net addition to their assets at all.

The following table shows the increases and decreases of gold holdings in the three months, April to June, 1932 (in \$ millions):

Increases					
France	...	...	...	...	206
United Kingdom	...	...	...	...	75
Netherlands	...	...	...	...	40
Switzerland	...	...	...	...	32
Belgium	...	...	...	...	8
Others	...	...	...	...	18
					<u>379</u>
Decreases					
United States	...	...	...	...	472
Germany	...	...	...	...	11
Poland	...	...	...	...	10
Others	...	...	...	...	16
					<u>509</u>

Since the decreases exceeded the increases, it is clear that the disappearance of gold into individual hoards was continuing.

The French absorption of gold was due once more to the liquidation of the foreign exchange held by the Bank

of France, which had diminished between March and June by \$249 millions.

Limited Results of Reflation, 1932

After the end of June, little more of the liquidation remained to be effected, and the inflow of gold into France practically ceased. The purchases of securities by the Federal Reserve Banks still continued, though on a more moderate scale, till the beginning of August when the holding reached \$1,851 millions, at which it remained till the end of the year. The net effect of the heroic measures of reflation in America was the creation of redundant cash in the hands of the member banks in the form of deposits at the Federal Reserve Banks in excess of reserve requirements to the amount of some \$250 millions.

It was a modest result, but not altogether ineffectual. In July faint stirrings were felt in the commodity markets. Rises here and there occurred in prices. First pig products were affected. Presently textiles, sugar, shoes and other commodities responded. For the first time since 1929 the index numbers of prices showed a really perceptible recovery. Professor Irving Fisher's index, which had reached a minimum of 59.3 in June, 1932, rose steadily to 63.2 at the beginning of September. The index of manufacturing production rose from 58 in July to 60 in August and 66 in September.

Nevertheless the corner was not turned; the vicious circle was not broken. It proved only too easy to re-establish unrelieved pessimism. The fact is that the policy of reflation was placed at a serious disadvantage by the adherence of the United States to the gold standard. American business was entangled with

European pessimism. The country's gold reserve was so vast that it seemed that the gold standard could never be upset, as it had been elsewhere, by an overwhelming demand for gold. In 1922-3, when the American monetary position could be dealt with in complete isolation from the rest of the world, credit relaxation, in the form mainly of open market purchases of securities, raised industry from the depths of depression to prosperous activity in fourteen months. Isolation was then possible because the rest of the world was off the gold standard. In 1932 the gold standard existed in France and several other European countries and their colonies, and the dollar could not depreciate in terms of wealth except in so far as the currencies of that group depreciated.

Had reflation started so marked a revival in the United States as to upset equilibrium with the European gold standard group, that would have meant a big increase in the purchasing power of the American consumers in world markets, and the consequent adverse balance would have become apparent in an outflow of gold. An outflow of gold originating in that way might have spread the inflationary influence to the European gold-standard group themselves. They could only absorb additional gold without an expansion of credit resulting so long as people were found, whether Central Banks, commercial banks or individuals, to hold the gold idle.

The outflow of gold that actually occurred up to June, 1932, originated not from any expansion of purchasing power in the United States, but from the action of the Bank of France in reducing its holding of foreign exchange, and from the hoarding of gold in Europe. The policy of reflation encountered a definitely deflationary

tendency in Europe. It was only after this condition of things had subsided, in July, 1932, that the policy of reflation began to prevail.

But by that time the open market purchases had almost ceased, and in the autumn the tendency towards a revival of activity faded away. There began an inflow of gold, a symptom of renewed depression. In January, 1933, the Federal Reserve Banks actually began to *sell* securities. The inflow of gold had increased the excess reserves to \$500 millions, and perhaps it was thought that this must be sufficient to reverse the deflationary tendencies. If so, that was a miscalculation.

*The American Banking Crisis and Restrictions
on Gold, 1933*

The same deadly disease that had destroyed the German banking system was assailing that of the United States. It was the appreciation of gold, or, in other words, the fall in the price level, that was steadily augmenting the burden of debts in terms of goods, and reducing those customers who had received advances from the banks to insolvency. The number of bank failures had reached 5,102 in the three years 1930-2, and at last in February, 1933, the breaking-point was reached. A series of "bank holidays" became necessary, first in Michigan and other States, and then, just at the moment of the entry of President Roosevelt into office at the beginning of March, 1933, throughout the United States.

Any general account of the emergency legislation which ensued would be out of place here. Banks which were found to be solvent were licensed to reopen after a few days. What concerned the gold standard was the

regulation of dealings in foreign exchange and gold that was introduced.

The exchange restrictions amounted to no more than those imposed in Great Britain in September, 1931, on the suspension of the gold standard, limiting purchases of exchange to normal requirements for trade or travel. Such restrictions have little effect so long as they leave traders free to accumulate the proceeds of exports abroad, and do not prevent foreign holders of balances in the country from disposing of them in other centres.

The restrictions on dealings in gold on the other hand were drastic. A simple prohibition of the export of gold, as in 1917, would have been sufficient to suspend the gold standard. But, besides the export of gold, transactions in gold and the holding of gold were prohibited.

Gold coin and bullion in private hands had to be given up to the Government. The gold certificates, which had been first issued during the Civil War, as titles to gold, in order to facilitate dealings in gold at a time when the paper currency was inconvertible and depreciated, and which had always been backed dollar for dollar by gold coin, were treated on the same footing. They were required to be surrendered to the Government. Gold and gold certificates alike were paid for in paper currency at the nominal parity.

*Departure of the United States from the
Gold Standard, 1933*

For a few weeks after the banking crisis of March licences for the export of gold were given without stint, and the gold standard was in effect allowed to work notwithstanding the prohibitions. On the 20th April, 1933,

there was a sudden change of policy. The free grant of licences ceased, and the dollar immediately began to depreciate. The resulting relief to business was sensational, the transition to activity rapid.

The index of factory employment had fallen from 108.4 in August, 1929, to 61.9 in July, 1932, and after recovering to 66.2 in November, 1932, relapsed to 62.2 in March, 1933. By July, 1933, the index was 77.4 and in September 82.8. The average weekly hours worked rose from 32.2 in March to 42.6 in July, so that the "man-hours" increased by over 60 per cent.

The index of industrial production rose from 60 in March, 1933, to 100 in July.

The exchange on Paris in July, 1933, averaged 5.459 cents to a franc. As gold par was 3.918, the depreciation of the dollar was 28 per cent. The pound sterling was at that time $31\frac{1}{2}$ per cent. below gold par, so the dollar had nearly caught it up.

The Rise of Wages checks Recovery, 1933-5

New York did not follow the example of London in applying a dose of dear money. The rediscount rate, which had reverted from $3\frac{1}{2}$ to $2\frac{1}{2}$ per cent. early in 1932, was raised in March, 1933, to $3\frac{1}{2}$ and reduced again to $2\frac{1}{2}$ in May. But the progress of revival in American industry was destined to suffer a check from another quarter.

As has been shown above (pp. 89 and 122-4) deflation causes depression and unemployment by reducing the consumers' income and the price level *relatively to the level of wages*. Wages in the United States had fallen heavily since 1929. The average hourly rates in 25 principal industries, having been 58.9 cents in

that year, were only 46 cents in March, 1933. The spurt in activity from April to July produced no rise.

At the same time attention was drawn to a remarkable and, as it seemed, disquieting lag of retail sales. The index of department stores' sales (100 in 1923-5), having averaged 59 in the first three months of 1933, rose to 67 in April, but was no more than 69 in July. Here was plausible support for the easy and shallow doctrine that consumption demand depends on wages. It was argued in some quarters that, so long as retail sales did not expand more rapidly, revival was precarious, and that the way to make them expand was to raise wages.

This was the time of Mr. Roosevelt's earliest economic experiments. One of the first steps in the "New Deal" was the National Industrial Recovery Act, passed in June, 1933, which was to introduce into every industry a code providing on one side for a control of production and selling, and on the other for the regulation of the conditions of labour.

The control of production and prices at a time when demand is insufficient (as it still was in June, 1933) means the maintenance of profits by restriction of activity and therefore at the expense of employment. Had the monetary expansion that had been in progress for three months continued, the expansion of demand might have allowed profits and employment to advance together. But the codes under the National Recovery Act had also to deal with the conditions of labour, and that turned out to mean that hours were to be reduced and weekly wages maintained unchanged.

The idea was, no doubt, to spread employment by reducing hours, and at the same time to maintain demand by increasing hourly wages. But the increase in hourly wages meant an increase in costs. The average hourly

wage rose abruptly from 45.5 cents in July, 1933, to 53.1 in September and continued to rise.

The increase in costs suddenly extinguished the prospect of profit that had been offered to industry by the growing depreciation of the dollar. With the prospect of profit there vanished the stimulus to activity, and the expansion of credit which was the underlying cause of the depreciation. The vicious circle of expansion was broken, and the impetus of recovery was lost. The depreciation itself was interrupted.

The index of employment in industry rose to 82.8 in September, 1933, and 82.9 in October, but then fell to 80.1 in December. Weekly hours worked fell from 42.6 in July to 36.2 in October and 33.8 in November and December. An index of man-hours may be formed by multiplying the index of employment by the hours worked. If we make the index 100 in 1929, with employment 106.0 and hours 48.4, we get the following results:

	Man-hours			
1929				100
March, 1933	39.0
July, 1933	64.3
October, 1933	58.5
December, 1933	52.8
March, 1934	61.6
February, 1935	65.1

It was a year and a half before the state of economic activity attained in July, 1933, was reached again.

The Purchases of Gold, 1933-4

The dollar actually rose in terms of gold and other currencies for a few weeks after the adoption of the

codes under the National Industrial Recovery Act on the 19th July, 1933, and though it fell slightly again in September the impetus had been lost.

On the 22nd October there came a new departure, in the shape of Government purchases of gold. The policy of suppressing the monetary functions of gold had in any case to be so far modified as to allow the American producers of gold to dispose of their product, and to allow those who needed gold for use in industry to buy it. The requirements of the latter were met by licensing. The producers might likewise have been given licences to sell or export. But it was decided to offer to buy their gold at a stated price.

The American output was not great enough to give this measure any considerable monetary significance, but on the 29th October it was followed up by an undertaking also to buy *imported* gold at the stated price. And the price at which gold was bought was steadily raised by small steps every day.

That meant a gradual depreciation of the dollar against the remaining gold standard currencies, and likewise against other currencies unless steps were taken to bring about an equivalent depreciation of these latter. But how far was the process to go? Among the measures passed in the preceding spring was one empowering the President by proclamation to reduce the gold contents of the dollar by not more than half. No proclamation had been issued, and the price at which gold was bought was being changed every day. But it might reasonably be inferred that a definitive determination of the gold equivalent of the dollar was to follow.

Now when the intention of the monetary authorities of a country to reduce the value of the monetary unit at some future time becomes known, the result is always

to *anticipate* the reduction. No one will acquire money at a higher value; if the monetary authority itself undertakes to receive it at a higher value there will be a rush to dispose of money in accordance with its offer while the opportunity lasts.

In November, 1933, the United States Government did not undertake to give gold for dollars, or to give dollars for gold at its stated price without limit. But the market soon reflected the expectation that the price of gold in dollars was to go higher. On the 15th November the exchange on Paris rose to 6.55 cents for a franc, showing a depreciation of 40.2 per cent., whereas the price of gold was \$33.56 an ounce corresponding to a depreciation of 38.4 per cent. The next day the exchange rose to 6.70, making the depreciation 41.5 per cent.

The depreciation of the dollar in the foreign exchange market was showing signs of outstripping the regulated depreciation in relation to gold. Thereupon the daily rise in the price of gold was abandoned. Small adjustments were made at longer intervals, and by the middle of January, 1934, the price was still no more than \$34.06.

*Gold Reserve Act and the new Gold Parity of
the Dollar, 1934*

This was the prelude to a proclamation. But before any proclamation was actually issued there intervened the Gold Reserve Act, which required the future gold equivalent of the dollar to be not more than 60 per cent. and not less than 50 per cent. of the pre-existing standard. The upper limit corresponded to a price of gold of \$34.45, and the buying price had been fixed at that figure since the 15th January. The Proclamation made little change in this price, for it fixed the gold contents

of the dollar at $13\frac{5}{7}$ grains, fine, or almost exactly $59\frac{1}{18}$ per cent. of the former parity, making the price of gold \$35 a fine ounce.

The Gold Reserve Act, though it confirmed the previous legislation against holding gold and against transactions in gold, nevertheless did in effect re-establish the gold standard. The gold held in the Treasury and Federal Reserve Banks was revalued, and a part of the windfall thence arising was used to constitute a fund of \$2,000 millions to be employed by the Secretary of the Treasury (the American Minister of Finance) in buying and selling gold and foreign exchange "for the purpose of stabilizing the exchange value of the dollar."

If that means keeping the value of the dollar in the foreign exchange market equivalent to $13\frac{5}{7}$ grains of gold, as prescribed in the President's Proclamation, that amounts to adherence to a gold standard. But it is not quite certain that that is what it does mean. The links between the market for gold in the United States and the world market in which the Secretary of the Treasury buys and sells have been severed. The former market is confined to licensed transactions, in which the price of gold might be quite different from the price corresponding to the foreign exchange value of the dollar. The two prices have, as a matter of fact, been the same, but if "stabilizing the foreign exchange value of the dollar" required in the opinion of the Secretary of the Treasury a change in its gold value, he might depart from the price of \$35 prescribed by the Proclamation in his dealings in gold. And it would seem that he is not even bound to keep the foreign exchange value of the dollar within the limits of 50 and 60 per cent. of the old parity (corresponding to gold prices of \$41.34 and \$34.45 an

ounce) to which the President's power of determining the gold equivalent of the dollar is confined.

Thus from a legal standpoint the gold parity of the dollar is by no means so firmly established as was required by the gold standard traditions of the nineteenth century. But the difference is not so material as at first sight it seems.

Experience in many countries has shown in 1914 and subsequently that it is only too easy to pass legislation to suspend or amend a gold standard law if the monetary authorities (Government and Central Bank) so choose. If there is an obstacle in the way of a change, it is to be found not in the statute book but in the minds of the authorities or in public opinion.

At any rate the United States dollar has been maintained consistently at the gold value instituted by the Proclamation of 31st January, 1934, and in that sense the gold standard has been adhered to. Measured by the exchange on Paris the dollar had fallen from 67 per cent. of its former gold par in October, 1933, to 59 per cent. in March, 1934. Once more the progress of depreciation had been greater than the rise of wages, the average hourly rate having risen from 54 cents in October, 1933, to 56.1 cents in March, 1934. Economic activity as measured by the index of man-hours had recovered from 52.8 in December, 1933, to 61.6 in March, 1934, but was still short of the level recorded in July, 1933.

The moment was an unfortunate one for linking the dollar to the group of currencies which had remained faithful to the gold standard. In France, the leading country of the group, a period of distrust had just been ended by the formation of a Government of National Union and a "restoration of confidence." "Confidence" meant confidence in the currency, it meant con-

tinued appreciation of the franc in terms of commodities. The French wholesale price index, which had been 627 in 1929 and was 405 in January, 1934, fell remorselessly and reached a minimum of 322 in July, 1935. The French index of industrial production fell from 83.5 in January, 1934, to 73.2 in December, and the French index of employment from 77.7 to 72.2.

Recovery resumed in the United States, 1935-7

Till near the end of 1934 revival in the United States was once again interrupted, the index of man-hours in November being 56.* Nevertheless there were powerful forces making for a return to activity, and the inertia of the gold standard group was not sufficient to restrain them. Gold in fact was flowing in, and the Treasury's purchases of gold, being represented by gold certificates deposited in the Federal Reserve Banks, enlarged the excess or surplus reserves of the member banks to higher and higher figures. By the beginning of 1935 the excess reserves were \$2,000 millions. The New York rediscount rate had been reduced from $2\frac{1}{2}$ per cent. to 2 in September, 1933, and to $1\frac{1}{2}$ in January, 1934. Meanwhile, with a view to setting this redundant money in motion, a steadily mounting budget deficit was incurred to provide money for relief, public works and other purposes. Prepayment of the veterans' bonus (above, p. 156) actually materialized in 1936, Congress having overridden the President's veto.

From the beginning of 1935 to the summer of 1937 was a period of steady progress in recovery. The index of employment rose from 84.6 in November, 1934, to 109.3 in July, 1937. The National Industrial Recovery

* A lower figure in September, 1934, was due to a textile strike.

Act was held to be unconstitutional in May, 1935, and weekly hours rose from 34 in November, 1934, to 41.7 in March, 1937. The index of man-hours in March, 1937, was 87.2.

Depression had been due to the appreciation of gold, and the appreciation of gold had come to an end. The index of world prices in terms of gold touched its minimum of 41.5, in the second quarter of 1935, and by the third quarter of 1937 had risen to 48.5. The index, being based on statistics of imports and exports, only records prices when goods are actually in course of being delivered, and that is usually at a considerable interval after the bargain was made. The turning-point in current market prices must therefore be dated somewhat earlier than the index shows.

Even when the index was 48.5, the dollar at 59 per cent. of its former gold parity was a long way from showing a corresponding depreciation. Indeed it was estimated that there were still 6,000,000 unemployed, in spite of the fact that manufacturing industry (at any rate so far as represented in the index of factory employment) showed practically the same numbers employed as in 1929. Hours worked had fallen from 48 in 1929 to little more than 40.

Recovery again checked by Rise of Wages, 1937

In Great Britain the pound had averaged 71.8 per cent. of gold parity in 1932, and had fallen to 62.6 per cent. in February, 1934, immediately after the Proclamation fixing the dollar at $59\frac{1}{8}$ per cent. In 1935 it had very nearly caught up the dollar, averaging barely 60 per cent. Though the depreciation of the pound and the dollar had not kept pace with the decline in prices in

terms of gold that had taken place since 1929, it exceeded that part of the decline which had taken place since 1931. There had been an even more notable recovery of economic activity in Great Britain than in the United States. The percentage of unemployed, having risen from 10.4 per cent. in 1929 to 22.1 per cent. in 1932, fell to 10 per cent. in the summer of 1937.

That was far from being a restoration of full employment, but was a relatively better result than in the United States. The reason for the difference is to be found in the continuance of the rise of wages in the United States. The average hourly wage in 25 principal industries at the end of 1934 was 59.4 cents, and thus was actually greater than in 1929. By October, 1936, it had risen to 61.9 cents, and the increase was suddenly accelerated. The National Industrial Recovery Act of 1933 had secured to labour the right of collective bargaining, and, though the Act was ruled unconstitutional in May, 1935, the right was confirmed by a subsequent Act. The improvement in business that was visible by the end of 1936 gave the labour unions the opportunity to try their new strength. The result is shown in the rapid rise of the average hourly wage from 61.9 cents in October, 1936, to 71.1 cents in July, 1937. That was more than enough to offset the rise in prices, and recovery was brought, for the time being, to an abrupt end.

France Abandons the Gold Standard, 1936

Meanwhile the gold standard group had been exposed to the full stress of the appreciation of gold and had at last given way. The relief brought to them by the rise in the gold price level which started early in 1935 was too late.

Belgium yielded to the pressure in March, 1935. Her currency unit was provisionally devalued to 72 per cent. of the parity that had been in effect since 1926. Like the United States she remained linked to gold though at a lower parity.

In France the source of weakness was the budget. The national income fell and fell:

	Milliards of francs				
1929	245
1930	243
1931	229
1932	206
1933	199
1934	184
1935	172

By 1935 the fall was 30 per cent. That was moderate in comparison with the reduction of 50 per cent. suffered by the United States from 1929 to 1932. But the loss of taxable capacity was enough to involve the budget in a series of heavy deficits. The deficits themselves impaired confidence, and the loss of confidence militated against the success of Government loans. The Government was driven to borrow from the Bank of France, and that intensified the loss of confidence. Every time the Government asked for legislation to raise the limit of its borrowing from the Bank of France there was a big outflow of gold. The gold reserve of the Bank of France fell by a succession of steps. It had been at its maximum of 83,342 millions of francs in November, 1932. After dropping to 73,971 millions in February, 1934, it recovered almost to the former maximum and then fell as shown on the following page.

BANK OF FRANCE GOLD RESERVE

				Millions of francs
March, 1935	...	...	...	82,635
May, 1935	...	...	...	71,779
November, 1935	...	...	...	66,191
June, 1936	...	...	...	53,999
September, 1936	...	...	...	50,111

What brought matters to a head was the formation of a Socialist Government with a programme of social reform in the spring of 1936. The programme included proposals for a big reduction of hours and for paid holidays, and at the same time there was to be no decrease, but indeed an increase in weekly earnings. President Roosevelt's National Industrial Recovery Act had been passed at a time when the dollar had been cut loose from gold, and it was possible to adjust the monetary system and the price level to the wage level. Even so recovery was set back two years. M. Blum's measures came at a time when the country's economic system was prostrate under a paralysing disequilibrium, and they aggravated the disequilibrium. French wages had fallen but little since 1929. Weekly hours of work, which had averaged 48, were now reduced by legislative enactment to 40. The effect of this and the other concessions was to increase the wage-cost of work per hour by at least 40 per cent.

As we have seen (above, pp. 142-3), it is theoretically possible for a country to maintain *any* par of exchange by excluding imports, if it is prepared both to sacrifice its export trade and to dispense with the foreign-produced goods which its consumers need. Germany relied on that procedure in the years following 1931. But even

Germany was soon compelled to modify it by giving open or concealed subsidies to exports (see below, pp. 190-3). France had refrained from any restriction on the foreign exchanges, but had already gone far in the quantitative limitation of imports, to say nothing of a high protective tariff.

Further steps in that direction were hardly practicable. In fact there was only one remedy. It was no longer a question of maintaining the franc at the existing gold parity. What had to be considered was what degree of depreciation was required to correct the disequilibrium between wages and prices.

The purchasing power of gold was more than double what it had been in 1929. In England and America a 40 per cent. depreciation of the currencies had been insufficient to restore activity. In 1929 French wages had still hardly been adjusted to the gold value at which the franc had been fixed, and it is possible that if they had remained at the same level in 1936 a 40 per cent. depreciation of the franc, bringing it to the old parity of 124 to £1, would have sufficed to establish equilibrium. But if in 1936 the wage level was 40 per cent. higher than in 1929, the franc would have to be correspondingly lower. A rate of something like 170 to £1 would be necessary.

The step actually taken in September, 1936, was modest indeed. The new value of the franc was not absolutely fixed but (like the dollar under the Gold Reserve Act of 1934) was to be held between fixed limits. These limits were 43 and 49 milligrammes of gold, nine-tenths fine, representing 65.6 per cent. and 74.8 per cent. respectively of the old parity. The exchange on London was held during the next few months at 105, equivalent to 46.35 milligrammes, nine-tenths fine. The gold

reserve, which amounted to 50,111 millions of francs at 65½ milligrammes, nine-tenths fine, was revalued on the basis of 49. Of the 17 milliards thereby added a sum of 10 milliards was used to form an Exchange Fund by which the gold value of the franc was to be regulated.

It is hardly necessary to say that France had quite failed to emerge from the morass. In March, 1937, the rate of exchange was adjusted from 105 to 110 francs to a pound. In July, 1937, the lower limit of 43 milligrammes, nine-tenths fine, was abandoned and the gold in the Bank of France, then 48,859 millions, was revalued at 43 milligrammes and so raised to 55,677 millions.

In the autumn of 1937 the exchange on London was raised to 147. But by that time recovery in the United States and Great Britain had sustained a setback, and the situation was much more unfavourable than it had been a year before.

Recession in the United States

We saw above (p. 172) that the rapid rise of wages in the United States between October, 1936, and July, 1937, once more interrupted recovery. A rise of wages in a country where the price level is free to rise does not necessarily cause disequilibrium or depression. And there was nothing in the situation of the United States in 1937 to prevent the appropriate expansion of the consumers' income from occurring. The currency was indeed linked to gold, but gold had practically ceased to be an international standard. Belgium was almost the only country that was working a gold standard of the traditional type. So far as the monetary demand for gold was concerned, the only country that counted was the

United States. The purchasing power of the dollar determined the purchasing power of gold, as in the years 1920-5.

Since January, 1934, there had been an inflow of gold on a gigantic scale. The gold in the country had risen from \$6,833 millions (new dollars at \$35 to the ounce of gold) at that date to \$10,648 millions in July, 1936. The gold was bought by the Treasury, and was promptly made available for Treasury expenditure. Gold certificates were issued against the gold to the Federal Reserve Banks, and the Treasury was credited with the equivalent. As fast as it was disbursed by the Treasury, the money found its way into the reserve deposits of the member banks, and their reserves were swollen far beyond all previous standards. The excess reserves of \$500 millions at the end of 1932 had counted as large. In January, 1934, the excess reserves were more than \$800 millions and by the end of 1935 they had reached \$3,000 millions.

According to the accepted tradition of the gold standard it is the function of an inflow of gold to evoke an expansion of credit, an increase in activity and a rise of prices, till the growth in the consumers' income attracts sufficient imports to stay the inflow. In the United States in the years 1934-6 this sequence of events did not occur, or at any rate was tardy and incomplete. The expansion of credit was far short of what the gold reserves would permit; activity improved but was far short of normal.

The country was suffering from an excess of "confidence" in the dollar. People in the gold standard countries were moved, both by distrust of the continued adherence of their currency units to gold parities that were visibly becoming intolerable, and also by the uncer-

tainties of a very disturbed international situation, to place the more liquid portion of their assets in Great Britain and the United States, but particularly in the latter as being more free from international entanglements. Much of the gold that entered the United States was the counterpart of this influx of fugitive money. It would have been dangerous to permit a transitory movement of this kind to exert its full effect upon credit, that is to say, to induce such an expansion of the consumers' income as would attract the whole counterpart of the fugitive money in the form of imports. But this danger was not in sight. The expansion of the consumers' income was not too fast but too slow.

For the "confidence" in the dollar existed inside the country as well as outside. The existence of an active and highly speculative stock market with a widely spread clientele has directed the attention of the American business world in recent years to the forecasting of industrial conditions. The experience of 1933, when the dollar was at first allowed to run wild under the incitement of inflationary legislation, and then harnessed to a rising price of gold, had (quite rightly) associated the idea of inflation with economic activity in the minds of traders as effectively as in those of the economists.

When the dollar was once more tamed and tethered to gold at the beginning of 1934, the immediate effect was to damp down activity. But the course of business in 1935 and 1936 reminded people that a revival of business was possible even within the limits of a gold standard.

In 1935 a Banking Act had been passed which empowered the Board of Governors of the Federal Reserve System to increase the statutory reserve requirements of the member banks. The member banks had been

required to keep reserve balances at the Federal Reserve Banks not less than 7, 10, or 13 per cent. (according to locality) of their demand deposits and 3 per cent. of their time deposits. These percentages could now be raised up to a limit of double. In August, 1936, this power was exercised to the extent of increasing the percentages by one-half in each case. Thereby the excess reserves were reduced at a stroke from \$3,105 millions in August to \$1,852 millions in September. Even the latter figure was, as the Board said, "a larger volume of excess reserves than at any time prior to the recent large gold imports." The action taken was intended to prevent "an injurious credit expansion."

The Gold Scare, 1937

In December, 1936, the problem of superfluous gold was attacked from another side. The Treasury decided to "sterilize" any further gold bought; it would no longer issue gold certificates to the Federal Reserve Banks and spend the equivalent deposits, but would accumulate the gold in a separate inactive hoard like the British Exchange Equalization Account. The effect was to stop the growth of the reserve deposits.

Early in 1937 the reserve requirements of the member banks were again raised (by two steps, 1st March and 1st May) and the limit of double the old percentages was reached.

These measures placed the imports of gold in a new light, no longer as the basis of a promised monetary expansion, but as a burden to be carried either by the banks (at the expense of their shareholders) or by the Treasury (at the expense of the taxpayers). The conse-

quence was a sudden misgiving among the public as to the possibility of continuing to buy gold at \$35 an ounce. As we have seen, the wealth-value of gold had more than doubled since 1929, and this had made gold-mining abnormally profitable all over the world. The world's output had grown from something under 20 million ounces to 30 million in 1935 and 33 million in 1936. And whereas 20 million ounces had been valued at a little over \$400 millions or £80,000,000 in 1929, 30 million were valued at \$1,050 millions or £210 millions in 1935. In the decade ending with 1929 a gold holding of about \$4,500 millions had been thought excessive for the United States. In 1937 a dollar, though less in gold value, was actually greater in purchasing power than in 1929, and the gold holding exceeded \$12,000 millions.

The "gold scare" that resulted in April, 1937, took the form of a sudden fear that the price of gold in dollars (and presumably in pounds sterling too) was to be reduced or (worse still) that the United States would cease to buy gold altogether. That fear need not have had any deflationary effect, for the gold value of the dollar might quite well have been raised without affecting its wealth-value. But the measures already taken to cope with the superfluity of gold had had a deflationary character, and had been devised to prevent "an injurious credit expansion," and the ineradicable tendency to assume gold to be the fundamental measure of value helped to associate the gold scare with expectations of deflation. And above all, these events came at a time when the sharp rise of wages was bound to check the recovery of business unless a corresponding monetary expansion permitted a remunerative price level to be reached.

Spread of the Setback to England and France

The activity of American industry fell away with a startling suddenness. The index of factory employment dropped from 109.3 in July, 1937, to 82.4 in June, 1938. Average weekly hours fell to 33.1, so that the index of man-hours, which had been 87.2, was no more than 53.1.

Many people attributed this setback to the reduction of the deficit on Government expenditure. Enormous deficits had been accruing throughout the six years ending with the financial year 1936-7, the lowest deficit being \$2,600 millions and the average exceeding \$3,000 millions. For the year 1937-8 the deficit was no more than \$1,377 millions.

But to suppose that a recovery that had shown such impetus for two and a half years could be violently reversed simply because the deficit had diminished somewhat (and a deficit of \$1,377 millions is not a small one) is rather far-fetched. There may have been some psychological effect from this as well as from other measures of a deflationary tendency. But far the most substantial cause at work was the rise of wages.

If so, however, there is an aspect of the matter that calls for explanation. The rise of wages that checked industrial activity in the United States might have been expected to stimulate activity in other countries, at any rate in so far as they were competitors with the United States in international trade. Yet British and French industry suffered much more from the contagion of American depression than they gained from the higher costs of American competitors. The solution of the puzzle seems to be that the chief importance of the United States in international trade is as a consumer of primary products. The rise of wages checked the activity of the

American manufacturers producing for their home market, and so diminished their demand for primary products. The depression was spread through the countries producing the primary products to the industrial countries.

A noticeable setback occurred in British industry, unemployment rising from 10 per cent. to 13. But the effect was felt most disastrously in France. The exchange was raised step by step, and when M. Daladier announced in May, 1938, that an exchange of 179 to £1 was to be the absolute limit, it was by no means certain that even that was high enough for equilibrium. Indeed whereas wages were some 30 per cent. above the level of 1929, the price level was not more than 5 per cent. higher than in that year. The index of employment in industry was only 81 in comparison with 100 in 1929.

The budget still remained the principal source of trouble. M. Reynaud, the Minister of Finance, in announcing the important measures of reform framed by decree in November, 1938, estimated the national income at 250 milliards. But conditions had changed vitally since 1929. Implicit in the rise in the wage level was a rise in the national income corresponding to equilibrium. And there had been an enormous increase in the expenditure of the Government, partly consequential on the rise in rates of remuneration, partly due to the need for rearmament.

The gold reserve was once again revalued, this time at 27½ milligrammes, nine-tenths fine. It was raised thereby from 55,808 millions to 87,264 millions. That was above the maximum reached in 1932, but in the francs of the gold parity in force in 1932 it would have been only 36,637 millions. The gain from revaluation

was applied to cancelling a part of the huge advances from the Bank of France to the Government which had resulted from the persistent deficits.

CHAPTER VII

OFF GOLD

Instability of the Wealth-value of Gold

THE conclusion which emerges from the experience of the gold standard in the inter-war years is that not *a* defect but *the* defect of the gold standard is the instability of the purchasing power or wealth-value of gold itself. The economic dislocation of these years is often attributed vaguely to the war of 1914-18 and its after-effects. The destruction and loss that resulted from the war were of course tremendous. They were felt in the impoverishment of many individuals, whose resources were diminished or destroyed, and in a heavy burden of taxation to provide pensions for the disabled and to pay interest on national debts which represented no productive outlay. But such losses and burdens do not necessarily cause any serious economic *dislocation*. The war itself showed how readily the productive power of a nation can be diverted from one kind of activity to another. The absorption of demobilized armies into full employment in 1919 afforded fresh corroboration of the same inference. By the spring of 1920 the productive resources of the world were being actively applied to repairing the ravages of war, making good arrears of capital maintenance and renewal, reconstituting stocks of commodities, and resuming the suspended work of development.

What interrupted this state of activity was the sudden deflationary movement referred to above (p. 96), which

raised the wealth-value of gold by 75 per cent. in a year, and imposed a similar deflation on all countries which were guided in their monetary policy by the gold value of their currency units.

To express what has occurred since 1920 in terms of the pre-war trade cycle is a mistake. The trade cycle, it is true, was closely associated with changes in the wealth-value of gold, but there has been *no cyclical regularity* in the fluctuations of recent years.

In the United States the phases of a complete cycle were compressed into the three years from the spring of 1920 to the spring of 1923. There followed six years of activity uninterrupted except for short minor recessions, and then nine years of unbroken depression. The so-called "revival" of 1937 never reduced the number of unemployed below 6,000,000, whereas the highest figure reached in the depression of 1921-2, which was regarded then as the most severe the country had ever undergone, was estimated at 4,000,000. "I could show you hills," said the Red Queen, "in comparison with which you would call that a valley."*

The fact is that there had not been a complete cycle in the United States since 1923. And, as to Great Britain, the country had not known full employment since 1920. At the outbreak of war in 1939 it was still floundering in the depression from which it had failed to emerge when the gold standard was restored in 1925.

The tremendous rise in the wealth-value of gold in the years 1930-5 put a far greater strain on the gold standard countries than that of 1920-1. Not only was the rise in 1920-1 somewhat less in extent, but it ensued immediately upon an extravagant inflation. Prices had

* And later she said, "I've heard nonsense compared with which that would be as sensible as a dictionary."

far outstripped wages, so that there was an exceptionally wide margin of profits to take the shock of deflation, and wages themselves were in a fluid state, having for the most part been adjusted to the monetary position by a sliding scale based on the cost of living. Deflation reduced the cost of living, and corresponding reductions of wages followed automatically. In Great Britain wages were reduced by no less than 36 per cent. Even so the strain of returning to the gold standard at the old parity was severe.

In 1930 wages were less pliable, and during the depression they fell only about 5 per cent. In some other countries a more substantial fall took place, in the United States 23 per cent., in Germany 22. In France wages had not been completely adjusted to the devaluation of the franc and actually continued to rise in 1930. At their minimum in 1935 they were very little below the level of 1929.

We have shown above (pp. 122-4) how vital a part is played by the wage level when a country has to face a rise in the wealth-value of gold. To maintain the gold standard, it must bring about an equivalent rise in the wealth-value of its own currency unit. The consumers' income must be diminished, and, if wages resist reduction, the diminution must be effected in the first instance by a curtailment of profits and then by unemployment.

Restriction of Imports

This is the process of deflation, which, if pushed beyond a certain limit, becomes intolerable. A failure to apply sufficient rigours of deflation is felt in the form of an adverse balance of payments and an outflow of gold. A country which has reached that stage has two

alternative ways of escape. One is to abandon gold parity and to allow the currency unit to depreciate. The effect is to raise the prices of all foreign trade products; imports cost more in proportion to the consumers' income, and the demand for them is diminished; exports yield more, and the export industries are stimulated. So the adverse balance is corrected.

The other alternative is to apply restrictions to the imports themselves. The restrictions may take the form of higher import duties, but it is not possible to say beforehand what level of duties will be sufficient to keep imports down to the limit of what exports will pay for. Many countries have had recourse to a quantitative limitation of imports, any excess over the desired limit being absolutely prohibited. For each commodity a quota of imports had to be allotted. Inevitably the quota was settled with reference to the circumstances of the particular trade concerned, and the ultimate purpose of limiting the *total* amount of imports could not be kept in sight.

So, as we have seen (pp. 142-3), some countries, among which Germany was conspicuous, solved the problem by a control of the foreign exchange market itself. Whatever other restrictions might be applied, there was the overriding limitation that imports were not allowed to be *paid for* beyond what the exchange restrictions conceded.

Exchange control thus came in as a balancing factor to ensure that the other measures of import restriction, such as tariffs and quotas, did not fall short of what was necessary to maintain parity. The result was that every country was destroying the export trade of every other. The economic strength of a country usually lies in its export trades (being those for which it is specially fitted), and this general discrimination against exports meant a

general intensification of the depression. Any country which found itself suffering in its export trade from the restrictive measures of its neighbours was apt to retaliate by imposing similar restrictions. That might, indeed, be the only way in which it could maintain parity, but it contributed to make the world situation worse still.

Some countries pursued the system of exchange restrictions even after they had abandoned the attempt to maintain parity. That may be defensible as a method of preventing a flight from the currency, a catastrophic fall due to an overpowering distrust and to a demand for real values, based on more reliable units, at any price. But if the currency unit is maintained at a value which, though short of parity, is still too high to permit of equilibrium between prices and costs in international markets, the effect is to expose the export industries to a more severe depression than need be, when these very export industries are the sufferers from other countries' exchange restrictions and limitations of imports.

When a country remaining on the gold standard limits its imports, it does in some degree relieve its own industries from the depression at the expense of its neighbours. Its internal price level is raised, while its export industries still sell at world prices, and only suffer to the extent that world prices are affected by the single-handed action of the country concerned. But when a country which has *abandoned* the gold standard limits its imports, it discriminates directly and immediately against its own export industries. The price level of its exports is kept down through the exchange value of the currency being kept up.

Perhaps the keeping up of the exchange value of the currency is sought as a desirable object in itself. There is everywhere an almost ineradicable popular belief that

public policy requires a high exchange. Like all popular beliefs this has some foundation. A tendency for the exchange to rise (unless it be due to increased imports or diminished exports of *capital*) is a sign of increased exporting power or economic strength. It will be experienced by a country which has increased its efficiency or reduced its costs. So long as it is attained in this way, a high exchange is something to be proud of. People may legitimately say, "See how we have reduced our handicap." But that does not mean that it is desirable for the player to assume a reduced handicap when his skill does not deserve it. In so far as a high exchange is attained either at the cost of depression and unemployment or through a limitation of imports, it is not a sign of economic strength at all.

When a country has been driven to suspend the gold standard by a fall in the world price level, that means that at the world price level its export industries are unremunerative. They become under-employed, and their development is retarded. If this condition of things is prolonged, they may be permanently weakened. The suspension of the gold standard relieves the strain; it raises the equivalent of the world price level in terms of the country's currency. If the currency is allowed to depreciate to the point at which the world price level becomes normally remunerative, the relief is complete. The relief in that case is enjoyed not only by the export industries, but by all the others as well. If the depreciation of the currency falls short of that point the industries are only partially relieved and remain depressed.

German Export Subsidies

When a limitation of imports is resorted to to keep up

the exchange value of the currency, relief is given to industries other than the export industries (and particularly to those which compete with imports) with less depreciation of the currency than would otherwise be necessary. The relatively favourable exchange discriminates directly and immediately against the export industries, and becomes thereby a source of economic weakness in the future.

Germany, at any rate, could not acquiesce in the obliteration of her export industries. The maintenance of the old parity of the mark with gold was no more than a symbol. The export industries were subsidized through various and sometimes devious channels. At an early stage of the exchange restriction régime the practice began of supplying exporters who showed that they could not otherwise compete in international markets with marks at a specially cheap rate. Sometimes as an alternative they were allowed to buy German bonds from foreign holders. The exchange restrictions interfered with the regular payment of the interest on foreign-held bonds, and even where payment was permitted the fear that it might cease depressed the price of the bonds. The result was that the same bonds commanded a much higher price in Germany than abroad, and the German trader who was allowed to buy them treated his profit on resale as a subsidy.

Actual subsidies were also sometimes paid to exporters in cash (raised either by a levy on the home-sold output or by taxation). And eventually yet another method was devised and extensively used by countries which had exchange restrictions. When a restriction of imports has been resorted to by a group of countries in order to maintain the exchange values of their currencies, any two of the group can afford to make concessions to one

another. Each can afford to receive imports from the other, provided it can send the equivalent in additional exports.

This looks rather like a conjuring trick, but there is really no mystery about the underlying principle. Any country that restricts its imports raises the prices of the commodities affected above the world prices. When the restriction is merely a matter of an import duty, the producers of the home supply get the benefit of the higher price, while the Government gains the difference on the imported supply in the form of the duty. But where there is no duty, the price difference on the imported supply accrues to anyone who is given the privilege of importing. Thus if the traders in two countries subject to import restrictions are permitted to make a "barter" agreement for exchanging one another's products, it may be that the exporters of each country can make a profit by selling in the restricted market of the other, when they would find the world prices prevailing in a free market too low to be remunerative. The same result may be obtained from a clearing agreement, under which there is no direct barter, but the proceeds of sale of each country's imports from the other are set off against one another so that imports must eventually be paid for by exports.

These arrangements give rise to *additional* trade, for there is nothing in them to make exports to free markets more difficult than they would otherwise be.

The countries with restrictions are not likely to form an economically self-contained group that can dispense completely with imports from any outside countries without serious sacrifice. But by applying clearing or barter agreements to such imports as they can get with reasonable facility from one another, and limiting their

imports from outside countries to those not otherwise procurable, they can greatly relieve the detrimental effects of exchange restrictions upon themselves.

Whatever device may be favoured for subsidizing exports, the upshot is to put the country approximately in the same position as if its currency were depreciated. The First Addendum to the Report of the Macmillan Committee (signed by McKenna and Keynes among others) pointed out that "precisely the same effects as those produced by a devaluation of sterling by a given percentage could be brought about by a tariff of the same percentage on all imports together with an equal subsidy on all exports, except that this measure *would leave sterling international obligations unchanged in terms of gold*" (Cmd. 3897, p. 199). To Great Britain as a creditor country the maintenance of a high value of its currency unit for the purpose of international obligations would be a gain (provided the increase in the burden of debts did not provoke defaults). But to a debtor country like Germany, with external obligations that required an excess of exports to pay them, the subsidy calculated at the same percentage as the import duties would have been less attractive. The subsidy would exceed the yield of the duties, the difference going into the pockets of the German debtors.

But the course actually adopted by Germany was not identical with that indicated in the Addendum. The subsidies did not have to be at the same rates as the import duties, and the external obligations were in great part defaulted on.

Shielded by the exchange restrictions, like workmen building the piers of a bridge behind the shelter of a cofferdam, Germany was able to administer a strong dose of inflation to her economic system without affecting

the nominal gold value of the mark. A big programme of public works and then of rearmament was financed by short-term bills. Wages, having fallen by 22 per cent. from 1929 to 1932, were kept down to that level, and prices were to a great extent regulated. Heavy taxation, latterly especially on profits, helped to prevent the inflation from getting out of hand. The number of unemployed was reduced from an average of $5\frac{1}{2}$ millions in 1932 to less than a million in 1937 and 270,000 (including Austria) in October, 1938. Indeed by that time the principal difficulty was a scarcity of labour.

Once again was illustrated the facility with which labour can be absorbed, even when there are big changes in the character of industry. The fact that in a totalitarian state labour is coerced and regimented does not destroy the value of the example. In a free labour market there is plenty of pressure on the workman to seek and accept employment if only there is a demand for his labour. And there is no reason why relief or unemployment benefit should be so administered as to remove the pressure. If employers are under no compulsion to take workmen whom they regard as unsuitable, there may be a somewhat larger residue of unemployables than in the totalitarian state. But it is not in human nature to be long content with the brand of incompetent idleness, when an active industry is offering every variety of opening for latent faculties. The exchange restrictions which played so conspicuous a part in Germany contributed in no way to the revival. Their function was to maintain the illusion that the currency was at its old gold parity.

Relief through Depreciation

The effect of a depreciation of the currency upon

productive activity is a matter which is very often misunderstood. It is commonly regarded as no more than a stimulus to the export industries, and even as no more than a temporary stimulus, liable to vanish as soon as the currency has ceased to fall and has come to rest at a depreciated value.

That is much too narrow a view. Depreciation affects directly the prices of *all* foreign trade products, the "external price level," comprehending not only exportable but importable commodities, all industries in fact which are in competition, whether through exports or through imports, with foreign products. And it does not stop there, for there is an immediate tendency for the prices of home trade products to rise in sympathy. The "internal" price level adapts itself to the external. The incomes of all who produce foreign trade products, those who compete with imports as well as those who produce for export, are increased, and from these increased incomes there emanates an increased demand for products of all kinds. The demand within the country for foreign trade products is kept in check by the rise of prices, corresponding to the unfavourable rates of exchange, but the increased demand is felt in the market for home trade products. It stimulates output and raises prices, and thereby increases the incomes of the producers of home trade products. There is a still further increase in demand for products of all kinds, till the consumers' income and outlay are once more in equilibrium with the world price level as raised by the depreciation of the currency.

That is the causal sequence in the case where the originating disturbance is a depreciation of the currency. But the more natural procedure is to start with credit regulation. So long as a country is tied to the gold

standard, it is precluded from any relaxation of credit which will endanger parity. A relaxation of credit aims at enlarging the consumers' income and outlay. It increases the demand for goods, and so extends productive activity and employment. But the demand for goods includes a demand for foreign trade products, and, so long as the prices of foreign trade products are kept down by the gold standard to the international level, the increased demand must mean an excess of imports and a loss of gold.

The gold standard interposes a barrier to that enlargement of the consumers' income and outlay, which (once the practicable limit of the reduction of wages has been reached) is the indispensable means of improving employment. The suspension of the gold standard removes the barrier, and opens the way to a relaxation of credit. If the Central Bank proceeds to relax credit, the consequent enlargement of the consumers' income and outlay will be the direct cause of improved productive activity, and the depreciation of the currency will appear as a necessary corrective of the excess of imports which would otherwise result from the growing purchasing power of the population. Prosperity will then spread from the producers of home trade products to the producers of foreign trade products, instead of from the latter to the former.

Even so the depreciation of the currency is without doubt a vital condition of the revival, for without it the producers of foreign trade products would be left to compete at world prices. But the essential factor is the enlargement of the consumers' income and outlay, which brings activity to *all* branches of production. It is primarily an expansion of demand in terms of monetary units, and it takes effect both in increased production

and also in a rise of prices. It will only have done its work when production has reached capacity and prices have reached their due relation to costs. Unemployment will then be eliminated, and profits will be normal.

Effects of Depreciation on other Countries

When there is an appreciation of gold, every gold standard country has to keep pace with all the others in restricting the purchasing power of its people in world markets. Failure to do so involves an unfavourable balance of payments. The need for restricting purchasing power is imposed on any country simply by the action of all the rest. They seem to be following one another, but in reality they are driving one another.

At first sight the depreciation of a currency appears to contribute at least as powerfully as the restriction of imports to the general curtailment of demand. But that is not so, because, as the currency depreciates, the consumers' income itself expands; it expands to whatever extent may be necessary to attract imports equivalent to the country's exports. The depreciation favours exports because it favours production in general by making it remunerative, and, as exports increase, the country's purchasing power in world markets has to increase, *despite the depreciation*. The increase in the consumers' income therefore has to be *more* than in proportion to the decrease in the value of the currency unit, and the demand emanating from the country in world markets is not diminished, but increased.

The demand may not be exclusively for commodities. It may be in part a demand for external investment, which is an "invisible import." It has been pointed out above (p. 127) that depression cuts short the supply of

savings available in the industrial countries for investment in countries which are undergoing development. When industry becomes remunerative, savings revive along with profits, and external investment can be resumed. The effect on economic activity in the countries to which the investment is directed is just as favourable as that of an increased demand for their products.

The reversal of the customary position of Great Britain as an external investor in 1931 was a striking result of the depression. Such external investment as occurred in that year was exceeded by the calling in of debts, maturities, sales of securities, etc., to an estimated amount of £100 millions. The way to restore the normal position under such conditions is to establish a price level that makes industry remunerative, and so to re-create the fund of profits out of which investment, whether external or internal, chiefly comes.

But, it may be asked, is not a re-establishment of normal economic conditions impossible so long as the world price structure is full of glaring disparities? In most countries nowadays the production of foreign trade products forms a great part and in some the greater part of the aggregate of economic activity. Depreciation of the currency will raise the external price level, but it will still leave particular prices in the same proportion as in the outside world. Any industry selling in world markets a product of which the price is disproportionately low will remain depressed, and its troubles will not be cured through other industries enjoying excess profits. In an extreme case a country may have specialized in some natural product like Chilean nitrate or Australian wool, and, when the price of this product collapses, the goods of all kinds to be obtained in exchange for the country's output in world markets may be so diminished

that the people are seriously impoverished whatever happens to all their other industries.

It is therefore not universally true that the economic activity of one country can be restored to normal by a suitable monetary expansion independently of the rest of the world. But the exceptions are those only of undue dependence on a limited range of export industries and excessive depression of the prices of the products of those industries. If we are considering the case of a manufacturing country, exporting a variety of products of which the prices are in general *less* depressed than the average, it will not suffer seriously from the disparities of world prices. It may be that, at the rate of exchange which suits its principal export industries, some industries, especially among those competing with imports, will still be faced with unremunerative prices. But in a country of the type assumed these latter industries will be only a subordinate part of the economic system. They will in any case get the advantage of prices raised above world prices in proportion to the depreciation of the currency; their only trouble is that that is not enough to bring them all the way back to normal.

Foreign competitors of the country's manufacturers would suffer from what is sometimes called "exchange dumping," that is to say, the underselling that results when a depreciation of the currency reduces the manufacturers' costs. But on the other hand this reduction of the gold prices of manufactures in international markets would mean an increased consumption and consequently an increased demand for materials.

*The Price Disparity between Natural Products and
Manufactured Products*

The distresses of the producers of natural products

are partly due to the fact that concessions made on the prices of materials have little effect in stimulating the demand for the finished products. The demand for the former is *derivative* from the demand for the latter. A reduction of the cost of manufacture occasions an expansion of the demand for materials at existing prices, and even at *higher* prices.

At a time of world-wide depression the restoration of the production even of one great manufacturing country to full activity and of its demand for natural products to normal would contribute materially to revive business among the producers of these things, that is to say, mainly among the new countries. And it would do something towards narrowing the disparity between the prices of natural products and those of manufactures.

The narrowing of this disparity would in one way be a cause of loss to the manufacturing country. Exports pay for imports, and a greater quantity of exported manufactures would have to be sent to procure in exchange a given quantity of imported natural products. But that is merely to say that an entirely fortuitous and necessarily transitory advantage would have to be given up as a condition of the return to normal productive activity. The prices of manufactured goods are, as we have seen, relatively higher than those of natural products only because the output of the former is more readily curtailed. That is the cause of unemployment, and if unemployment is to be remedied, there must be a restoration on the one hand of the output of manufactures and on the other of their prices to the normal relations to the output and prices of natural products.

This process also involves a rise in the cost of living. Under conditions of depression the industrial population enjoys a rise of real wages in the form of a fall in the cost

of living. But that is because the cost of living depends predominantly on natural products. The workpeople can only escape from unemployment at the cost of surrendering this advantage.

The disparity of prices of natural products and manufactured products arises from the resistance of wages in the industrial countries to reduction. It has the effect of facilitating the competition in manufacturing of any country in which this resistance is not felt. The countries which depend on the export of natural products, being faced with a relentless contraction of demand and a collapse of prices, find employment in manufacturing relatively more attractive than before. If they resort either to the restriction of imports or to a depreciation of their currencies, the relative attractiveness is accentuated. The conditions of depression give a stimulus to manufacturing activity in the countries of this type, and a permanent encroachment on the markets of the industrial countries results. Even before 1930 the overvaluation of the pound sterling in relation to the British wage level was steadily undermining the great export industries of the country. The onset of a more severe and widespread depression intensified the process and other industrial countries suffered from it. Much of the new industry established under the influence of the depression gained a permanent footing. Sometimes it was found to have an efficiency and a competitive power that would have justified its existence without any special stimulus, but, even where that was not so, the countries concerned would not be likely to let it be extinguished.

Thus depression inflicts a permanent loss on the countries that are great exporters of manufactures. That does not mean that, when the conditions of depression

are removed, and the price disparities come to an end, these countries do not regain normal activity and full employment. Once an adequate demand is felt, labour and capital can adjust themselves to new channels. But the loss from the abandonment of specialized skill and specialized plant and the destruction of business goodwill may be very heavy.

The idea that a country which is suffering a loss of export markets in this way is somehow driven to seek relief from its troubles by retaliating, and itself excluding imports from other countries, is entirely fallacious. That would only make things worse for the export industries, since the exclusion of imports would raise the exchange value of the currency unit.

The Pound Sterling and the World Price Level

If the currency of a great industrial country, confronted with a world depression, becomes depreciated, the costs of its exports in terms of other currency units are immediately reduced. The output and sales of its exports are increased, and, as the production of one such country is a considerable factor in world markets, the prices of those goods in which it specializes will fall. The rise in the country's external price level in terms of its own currency would thus be partly counteracted, but not wholly, for a reversion to the former price level, which was unremunerative, would mean a relapse into depression.

When Great Britain suspended the gold standard in September, 1931, there were critics of that step who asserted that the depreciation of the pound sterling, instead of raising the British price level, simply lowered the gold price level. But we now see that the fall in the gold price level, resulting from depreciation, would not

extend to all commodities; it would be confined to those of which the prices had been kept up relatively to the rest by high costs and restricted output.

The effect of the depreciation of the money units of some countries on prices in the rest is substantially the same as that of a reduction of wages in the former countries. In either case the reduction of costs permits of a reduction of those prices which have in the first instance been artificially sustained by high costs and by the consequent decline of output. In either case those countries which have effected the reduction of costs gain a competitive advantage over those which have not. The depreciation of the currency only seems to confer an "unfair" advantage because it is more easily brought about than a reduction of wages.

In September, 1931, prices were already falling fast in all gold standard countries, and the rate of fall was not perceptibly accelerated, although, apart from any effects of the depreciation of the pound, deflationary measures which might have been expected to accelerate it, and particularly import restrictions of all kinds, were resorted to by other countries.

There was no rise, it is true, but an actual fall in the *sterling* prices of exported British manufactures. The following table shows what happened:

		Price Index of Exported Manufactures	
		Sterling	Gold
Third Quarter, 1931	...	71.9	71.9
Year, 1932	...	67.7	48.6
1933	...	66.8	45.5
1934	...	67.1	41.5
1935	...	67.0	40.1
1936	...	67.6	40.9
1937	...	73.4	44.0

There is a lag of some months between the trader's order which settles the price of exported goods and the actual shipment. For an interval after September, 1931, therefore, the prices of exports would reflect the fall which was in progress before the suspension of the gold standard. Only in 1937 did the sterling index rise above the level of the third quarter of 1931. At the beginning of 1938 it reached 76.6, but even then the gold value was no more than 46.5.

British foreign trade contributes a large part of the material composing the League of Nations index of prices in terms of gold. That is why that index shows a distinct acceleration of the fall at the end of 1931. The index was as follows:

1931, Quarter to	March	...	...	74
	June ...	...	...	71
	September	...	...	68
	December	...	...	58
1932	March	...	...	55
	June ...	...	...	54½
	September	...	...	52
	December	...	...	50

The drop of ten points between the September and December quarters is exceptionally wide. But this was the time when Bank rate was raised to 6 per cent., a measure which was expressly intended to prevent the British price level from rising.

The idea that a depreciation of sterling lowers world prices is usually supported by reference not to British manufactures but to products (chiefly materials and foodstuffs) for which the world market is centred in Great Britain and the prices are quoted in sterling. This marketing organization is undoubtedly an economic

power of great importance. But far from the sterling prices in the great British commodity markets being subject to inertia, they are remarkable for their fluidity. When a sudden fall in the gold value of sterling occurs, there might be a momentary lag of sterling prices owing to the "profit-taking" of those holding stocks or committed to forward purchases, who sell as soon as the market price exceeds by a respectable margin that at which they bought. Experts in the commodity markets who observed this, no doubt, passed on their wisdom to economists, who regarded an effect which in reality was a matter of days as a lasting influence on world trade.

Competitive Depreciation

Among the ill-founded fears by which monetary doctrine has been deflected in recent years a prominent one has been that of "competitive depreciation." Any country which has looked for a way of escape from the torments of deflation by departing from the gold standard has been warned that a depreciation of its currency unit will be viewed as an unfriendly act and will be quickly followed by an equivalent depreciation of the currency units of all its competitors and that, if that occurs, it will have gained nothing. But as we saw above (pp. 194-5) the benefit of depreciation is not in the competitive advantage, but in the rise of the external price level in terms of the depreciated unit. Any one country cutting loose from the gold standard at a time of general deflation obtains this benefit, as experience has shown over and over again. If revival has been interrupted in some of these instances, it has not been because other countries have followed the same course, but

because the country concerned has resorted to some counteracting measures such as a high Bank rate or a rise of wages.

It is true that the benefit is conditional on the action of the country being more or less *isolated*; there must be a sufficient inertia in the world price level in terms of other countries' currencies for it to pull against. If all the gold standard countries in the world devalued their currencies in the same proportion at a stroke, so that the rates of exchange between any two of them remained unchanged and only their gold value was altered, there would not necessarily be any immediate rise in their price levels. The value of all gold reserves in terms of currency units would be raised, and that would tend to bring about an expansion of credit. But it is the expansion of credit that would raise prices. The process described above (p. 194) as resulting from a depreciating currency would not occur of itself.

It is as if several men were in a pit too deep for any one of them to climb out alone, yet such that any one of them can climb out on the shoulders of the others, and, once out, can help his comrades up. But at no time from the first suspension of the gold standard at the end of 1929 to the break-up of the gold standard group in September, 1936, was there any question of general simultaneous depreciation. The countries acted one by one or occasionally in groups of two or three, but never so many at a time as to fail to secure a sufficient leverage on the price level.

Monetary Equilibrium

Once a country is released from the gold standard, there is no reason why its currency should be kept at any

value higher than the equilibrium level. The disadvantages of fluctuating exchanges are much the same whether the depreciation is 10 per cent. or 30 per cent. or 50 per cent. If the country has been driven off the gold standard because the appreciation of gold has destroyed its monetary equilibrium, it will find a natural resting-place when the currency has depreciated to the level at which equilibrium is restored, and industry can once again be remunerative and fully employed.

The essential advantage of abandoning the gold standard is that the value of the currency can be adjusted to the point at which *prices and costs are in equilibrium*. Here is the key to the unemployment problem. With a given level of wages, employment cannot increase unless the consumers' income increases. The consumers' income has to be adjusted to the external price level. The external price level is directly proportional to the prices of foreign currencies, that is to say, to the rates of exchange.

The greater the depreciation of the currency, the higher is the external price level. The higher the external price level, the greater is the consumers' income and the greater the amount of employment. When a state of full employment is attained, any *further* depreciation takes the form of excess profits. There would then result legitimate demands for increased wages, and the advantages of stability would be lost.

This policy does not threaten a *competitive* depreciation among the countries pursuing it. The relief each country gets is not derived from overreaching the others; it is derived from the country's industry becoming remunerative at the world price level. That is an advantage that is open to all, and every country that secures it can become fully employed. There is room

in the world for all countries to be fully employed. Given price levels everywhere in equilibrium with wages and debts, there need be no depression except such as is incidental to the troubles of particular industries.

Such a monetary system requires for its success that the currency of the country be so regulated as to stabilize the wealth-value of the monetary unit, and depends on that being possible. But the gold standard itself presupposes that the wealth-value of the monetary unit *can* be regulated. The Bank of England succeeded in the past in maintaining the pound at a prescribed gold parity only because it had the power of modifying the wealth-value of the pound. By restricting credit it could compress the consumers' income and raise the wealth-value of the pound; by relaxing credit it could enlarge the consumers' income and lower the wealth-value of the pound.

It was only when the wealth-value of gold was violently raised that any difficulty was experienced. The Bank could not maintain the pound at \$4.86 in September, 1931, because the wealth-value of \$4.86 had been forced up to an extent that would have necessitated an intolerable compression of the consumers' income. To maintain the currency unit at a value which does not require any compression of the consumers' income at all, or only such slight and fleeting compressions as are needed to meet fortuitous variations in the balance of payments, is a matter of no difficulty.

Inconvertible Paper Currencies

If this ideal state of things can be attained by abandoning the gold standard, why, it may be asked, should any country ever want to return to the gold standard?

If inconvertible paper currencies have often led to disaster in the past, that is because they have usually originated from some overwhelming financial strain due to war, revolution or an economic catastrophe. The very purpose of forsaking a metallic standard has been to alleviate the financial strain by a depreciation of the currency unit, and a more or less considerable depreciation has accordingly occurred. But experience has shown again and again that, the emergency once past, the currency can go on not merely for years but for generations without serious disturbances of its value. Such disturbances, when they occur, are usually traceable to another emergency of the same kind as that which originally led to the suspension of the metallic standard. And the new emergency, like the old, had it supervened upon a metallic standard, might have been expected to cause suspension and depreciation.*

If we examine the behaviour of inconvertible paper currencies under normal conditions, when they are exposed to no such emergencies, we find that they may sometimes be actually *more* stable than a metallic currency.

The Austro-Hungarian paper florin in the period 1866-1900 (see above, p. 76) responded regularly to the fluctuations of the trade cycle. It appreciated relatively to gold currencies when the price level in terms of gold was rising, and depreciated when the price level was falling.† That clearly implied that the cyclical fluctuations of the value of gold were not fully reflected in the value of the florin, and that the florin was therefore more stable than a gold unit.

To turn to a more recent example, we have the fol-

* See above, pp. 92-4, also *The Art of Central Banking*, pp. 266-70.

† See my *Currency and Credit*, pp. 372-5.

lowing record of the variations in value of the Spanish peseta in the years before the outbreak of the civil war:

		Spanish Wholesale Price Index	Exchange on United States (Per cent. of par)	United States Wholesale Price Index
1926	...	175.1	129.5	143.3
1927	...	167.9	113.1	136.7
1928	...	162.6	116.3	138.5
1929	...	167.7	131.4	136.5
1930	...	167.0	165.4	123.8
1931	...	168.8	202.1	104.6
1932	...	166.7	239.2	92.8
1933	...	159.1	186.3	94.5
1934	...	163.4	141.7	107.4
1935	...	164.2	141.3	114.5

No doubt the stability of the price index conceals big disparities among prices of particular commodities and groups, but still, after all allowances are made, it does denote a remarkable escape of Spain from the worst terrors of deflation.

Price Stabilization without Gold

These examples of the stability of paper currencies are from countries which have pursued no definite policy of stabilization. There is a strong presumption that a country which did adopt a positive policy could achieve better results.

There might be practical difficulty in finding a suitable criterion of stabilization of the monetary unit. If the regulation of credit were successfully directed to keeping an official wholesale index number close to a prescribed level, this would probably be a very good approximation to stabilization. But it would be imperfect. A further

refinement might be introduced by making allowance for any important changes in the prices of particular commodities which are traceable to non-monetary causes, such as variations in the yield of crops, reduced costs of manufacture, extraneous interference with sources of supply or with channels of trade, etc. Such disturbances introduce an element of doubt into the whole problem of stabilization. But it must be remembered that stabilization aims at keeping industry fully employed at normal profits. Failure would be signaled on the one hand by the appearance of unemployment, or on the other by the appearance of excess profits and pressure for increases of wages. Price index numbers therefore would not be the sole guide. The price level, instead of being kept fixed, would be *adjusted to the wage level*,* and would rise or fall as real costs of production rose or fell.

Here is a monetary policy that is calculated to secure normal prosperity and progress for industry independently of the vagaries of gold.

A Demonetization of Gold

Are we to conclude then that gold is no better than an unnecessary complication in the monetary system, a fifth wheel for the monetary coach? If so, it is a very expensive luxury. Of the annual output of gold, now exceeding £200 millions,† very little is needed for other than monetary purposes. And the world's monetary stock is estimated at £9,000 millions.

* See my paper, *Money and Index Numbers*, in the *Statistical Journal* for 1930 [Part I]. See also Final Report of the League of Nations Gold Delegation, paragraphs 93-4.

† In the years 1939-41 it exceeded £300 millions. It was then restricted in order to set free labour and material for the war effort, but it is likely to increase again.

It would of course be absurd to suppose that the demonetization of gold would enrich the world by that sum. It does not represent economic power in any very useful form; it is simply an accumulation of a luxury commodity of limited uses.

The demand for the commodity could not be so stimulated as to use up this vast supply even in the course of a generation or more, except at the cost of a tremendous sacrifice of value. During that period the greater part of the gold-mining industry would become unremunerative. Indeed the chief economic gain to be anticipated would be the release of productive power from gold mining for other purposes, a gain to be heavily discounted on account of the waste of skill and of capital involved in a sudden change.

The loss to communities dependent on gold mining for their economic existence would be overwhelming, and could hardly be left altogether uncompensated. There might be on balance some net gain to the world, but certainly not nearly so great as the figures would at first have suggested, and at the most hardly great enough to be a serious consideration in the problem.

But there are other vested interests to consider, besides those of the gold-producers. The proposal assumes action on the part of the currency authorities of countries holding gold reserves. It is they who would be offering gold for sale, and it is on them that would fall the sacrifice of value involved in the swamping of the market. When the silver standard was abandoned in the years following 1871, all the countries concerned soon stopped selling silver when the fall in its price became serious. The same thing would probably happen with gold.

All these vested interests would not constitute an

insuperable obstacle to the abandonment of the gold standard if there were no other advantage in its continuance. But in the world as it is, there would be undeniable disadvantages in cutting loose from it.

Advantages of Stable Rates of Exchange

One of the fundamental characteristics of a gold standard is that it keeps rates of exchange constant within very narrow limits. That undoubtedly contributes to the smooth working of international trade, but the nature and extent of its benefits should not be misunderstood or exaggerated. It is above all in the financing of trade by *international short-term lending* that the detrimental effects of variable rates of exchange are felt.

If each of two countries finances its own imports, the disadvantages of an unstable rate of exchange between them can be avoided. The merchant in either country exporting goods to the other draws a bill on the importer and realizes the price of the goods in his own currency by selling the bill. The bill is transmitted by the bank which buys it to the country on which it is drawn, and there sold to a bank of that country. The former bank will be paid in the foreign currency. The banks in either country can exchange the currency thus received with the banks of the other. Or a bank can use the foreign currency to buy bills drawn by exporters on its own country. No one will then hold a bill or credit expressed in any currency but his own except for the relatively short period intervening between the contract for the sale of goods and the arrival of the bill in the country of the buyer.

And even this preliminary period can be covered by the device of a forward transaction in exchange. At the

very date when the exporter first agrees to sell his goods he can arrange with his banker a "forward sale" of the money he will receive for the goods for the equivalent in his own currency. He enters into an undertaking to sell that sum in the foreign currency at an agreed rate, at a future date, when he expects the bill to have been accepted and its proceeds to be available. No money passes till that date arrives, but meanwhile the exporter is completely protected against any variation in the rate of exchange; he knows precisely what he will receive in terms of his own currency.

The banks which make forward^{*} purchases of sums in foreign currencies from their customers can themselves avoid incurring any exchange risk, for the banks in each country can effect forward sales or equivalent transactions with banks in the other. In fact in reckoning their net debit or credit balance in a foreign currency in the manner described above (pp. 32-3), the banks of any country take into account their forward purchases and sales as well as their immediate debits and credits^{*}

This procedure presupposes that the transactions in opposite directions, spot and forward taken together, will approximately balance, so that a net debit or credit on either side is not too great to be absorbed by the market. We have been assuming that each country

^{*} A bank which has effected future sales of 100,000 units of a foreign currency and future purchases of 60,000 will have balanced these transactions by buying and holding a sum of 40,000 units in the form of bills on the foreign country or balances in it. If its future purchases amount to 100,000 units and its future sales to 60,000 it needs to become a debtor for 40,000 units; it may borrow from a correspondent bank and sell the sums borrowed in the foreign exchange market for the equivalent in its own currency. But it is not the practice of banks to borrow, and if anything more than a casual overdraft is involved, the position will be covered by a forward sale of 40,000 units to a bank in the country in which the money units are current. To this latter bank the transaction is a forward sale of a foreign currency, and it can cover itself by a spot purchase.

finances its own imports, and, so long as that is so, this condition is fulfilled, not indeed for every pair of countries separately, but for any one country in its dealings with the rest of the world. If there is a disparity more than casual between its imports and exports (visible and invisible, current and capital) that is a sign of economic disequilibrium, and the balance has not to be absorbed but corrected.

But suppose, as is in fact the case in the normal working of international trade, that a very great part of the import trade of the financially weaker countries is financed not by themselves but by a limited number of financially strong countries. The position is then quite different.

Great Britain has long been accustomed to finance not only her own imports, but a great part of the world's trade as well. After the inauguration of the Federal Reserve System the United States acquired a considerable share of the business.

Bills are drawn on London or New York to finance consignments of goods destined for sale in other countries all over the world, and the buyers of the goods assume the liability to remit funds to the banks or accepting houses on which the bills are drawn by the time they mature. The smooth working of international trade has become dependent on the uninterrupted continuance of this system of financing.

The bills are ordinarily discounted and held in the centres on which they are drawn. But it is not merely that traders depend on the resources of London and New York to provide them with financial accommodation. For the principal commodity markets of the world are accustomed to calculate in British pounds and American dollars. Those trading in any commodity which has a

world market need a single centre at which the supply and demand from all quarters can ultimately be set off against one another, and a net balance revealed. At that centre the price is really made, and it is made in terms of the currency there established. The prices at other centres in terms of other currencies are derivative.*

A trader purchasing the commodity, and arranging for a bill to be drawn on his account by the seller, relies on the proceeds of the subsequent resale of the commodity to meet the bill at maturity. Calculations as to the future value of the commodity and the probable proceeds of resale will ordinarily be made in terms of the currency in which the market makes and quotes the price, and it will be convenient for the bills to be expressed in that currency.

Nevertheless, many of the traders who buy the commodity will intend to resell it in other countries using other currencies, and it is in these other currencies that they will receive the proceeds. So long as the currencies are all linked together by the gold standard and can only vary fractionally in terms of one another, a trader's calculations are not materially affected by the exchange risk. But if the currency for which he sells is liable to fluctuate considerably in terms of the currency in which the bills accepted on his account are expressed, he will be exposed to a risk of loss.

He can guard himself against loss by buying forward in the foreign exchange market enough of the latter currency to meet the bills. But if all the traders on whose account sterling bills have been drawn seek to protect themselves in this way, the market will have to sell them

* In the case of some commodities it would be difficult to say that either the English or the American market is the centre. But modern rapidity of communication enables two centres practically to function as one.

forward sterling on a greater scale than it can provide for. The demand is *all one way*, and does not settle itself automatically as is the case when the exporters in each of two countries make forward sales of the currency of the other. The banks which deal in the foreign exchange market will find themselves called upon to make forward sales of the currency of the financial centre, and they will seek to cover themselves by acquiring funds in that currency to hold till the forward sales mature. In effect they will become the creditors of the financial centre, so that it will really be they and not the banks of the financial centre that are financing the trade.

So long, in fact, as rates of exchange are fairly constant, the holders of commodities with a world market are quite content to be debtors in pounds sterling or American dollars. When they are no longer willing to accept that position, and are only willing to become debtors in their own currencies, the burden of financing them is turned over to the banks which are willing to become creditors in those currencies, that is to say, the banks of the debtors' countries. There is no international financing, for in effect the debtors' countries finance themselves.

Dr. Einzig in his *Theory of Forward Exchange* expresses doubt as to the reality of this obstacle in the forward exchange market. "Forward sterling," he writes (p. 175), "has experienced no such one-sided buying pressure since 1931, nor was there any such difficulty before 1925, although the volume of acceptance credits covered against the exchange risk was larger." But both in the years before 1925 and still more after 1931 the acceptance business was enormously reduced in volume. And in both periods there was, at any rate

at times, a heavy premium on forward sterling in terms of the more unstable currency units. Whatever the immediate causes of that premium may have been, it was bound to be a deterrent to any trader who feared to incur liability for a sterling acceptance.

After the re-establishment of the gold standard in Great Britain in 1925 there was a revival of the acceptance business (of which New York got a very considerable share), but in the years of depression from 1930 onwards it dwindled away more than ever. Exchange restrictions interfere with it even more than the instability of rates of exchange, for if there is a risk of remittances to the accepting centre being indefinitely delayed, forward exchange dealings are likely to become impossible.

It is for international *short-term* borrowing that the advantages of stable rates of exchange are felt. It is often said that the advantages are also substantial for long-term borrowing. But here the case is not so clear. When a borrower contracts to pay the service of a loan over twenty or thirty years to a foreign lender in the monetary unit of the lender's country, he can never be very sure that the value of the unit in terms of the unit of his own country will not change over so long an interval. And experience shows that in practice borrowers in countries of very unstable monetary units do not hesitate to commit themselves in this way. The sterling and dollar loans raised by South American countries supply numerous examples. And the sterling loans contracted by India when on a silver standard may also be called to mind.

So long as the currency unit of the lending country maintains an approximately stable wealth-value, the resources of the borrowing country can be effectively

drawn on to pay the service of the loan. What does cause trouble is not the depreciation of the borrowers' currency unit in itself, but a *rise* in the wealth-value of the *lender's* unit. That was the explanation of the numerous defaults in the inter-war years. Even with the dollar and the pound at less than 60 per cent. of their former gold value, these units represented a greater wealth-value than before 1930, and a loan service calculated in either of them took a greater portion of the debtors' resources than was anticipated when the loan was contracted.

The advantages of stable rates of exchange are incontestable, whatever doubts there may be as to their precise limits and extents. But the gold standard is not the only method of securing stable rates of exchange. An exchange standard need not be a *gold* exchange standard, and we have seen numerous countries linking their currency units to the pound sterling when it was detached from gold, and maintaining at any rate a substantial part of their monetary reserves in the form not of gold but of sterling bills and balances. Other countries link their currency units to the American dollar, and they might continue to do so even if the American dollar ceased to be linked to gold. A world-wide system of stable rates of exchange could be established without any relation to gold at all, if, for example, the monetary authorities of Great Britain held a reserve in dollars in New York, and those of the United States held a reserve in pounds sterling in London, and these reserves were employed to maintain a fixed rate of exchange between pounds and dollars.

An Anonymous Asset

Nevertheless there is a very real convenience in using

a metallic standard and metallic reserves. Other assets take the form of *debts*, and every debt depends for its value on the person and local situation of the debtor. Gold is an *anonymous* asset, and is capable of transportation from one place to another without retaining any link with the place of its origin. The shortage of gold, out of which the depression arose after 1929, began as we saw (above, pp. 118-19) with the absorption of gold by the Bank of France in order to reduce an excessive holding of foreign exchange. A sum of $32\frac{1}{2}$ milliards held in the form of short-term debts due in New York and London was indeed an embarrassment. Even though the debtors were unexceptionable (being for the most part the British and American Governments) the management of so vast a sum, largely in bills which required replacement at short intervals, involved the Bank of France in an undesired responsibility for the affairs of the London and New York money markets. And there was a danger of a depreciation of the pound or the dollar. When the pound depreciated, it was gold, it was true, that had misbehaved and not the pound, and when the Bank of France had to write down the value of its sterling assets from $7\frac{3}{4}$ to $5\frac{1}{2}$ milliards in December, 1931, the $5\frac{1}{2}$ milliards were worth not less but substantially more in terms of wealth than the $7\frac{3}{4}$ milliards at the time in 1927 and 1928, when the sterling assets had been acquired. Nevertheless there was a most embarrassing paper loss. And the Bank proceeded to transform nearly all the rest of its foreign exchange holding into gold, and so escaped a further heavy paper loss when the dollar followed the pound along the path of depreciation.

With the collapse of the "gold bloc," the gold standard group that had survived up to September, 1936, the

practice of managing the foreign exchange market passed to a great extent from the hands of Central Banks into those of governments. When the purchase and sale of gold and foreign exchange involve an indefinite exchange risk, Central Banks cannot afford to assume the responsibility, and, as we saw above (p. 152), the British Exchange Equalization Account was instituted in 1932 to meet this need. The American Stabilization Fund formed in 1934 (above, p. 168) served the same purpose, and similar funds were created in France, Holland, Switzerland and for a time in Belgium. The general practice in the management of these funds was to acquire and hold gold to the almost entire exclusion of foreign exchange. When France devalued the franc in September, 1936, France, Great Britain and the United States entered into a Tripartite Agreement by which they undertook so to conduct their monetary affairs as to maintain the greatest possible equilibrium in the system of international exchanges. The agreement (to which Holland, Switzerland and Belgium soon afterwards adhered) was followed early in October by an arrangement in accordance with which any of the participating countries would supply gold in exchange for its own currency when acquired by any of the others.

The currency units of the United States and Belgium were fixed in gold, those of Switzerland and (for a time) France were free to vary within prescribed gold limits, and those of Great Britain and Holland and later France were not restricted by any limits.

Thus gold retained its function as a medium for the settlement of international balances even when it was largely deprived of its fixed valuation in terms of currencies. And the demand for it for this purpose (supplemented by the hoarding demand) maintained its wealth-

value at the extravagant height to which it had been raised by the deflation of the preceding years. At the time of the gold scare in 1937 people suddenly realized that the wealth-value of gold had been forced up, and that gold was not necessarily a more reliable store of value than a currency unit. But the attractions of an anonymous asset prevailed, and the misgivings were soon dispelled.

On Gold Again

In the United States ever since the Gold Reserve Act, was passed early in 1934 the Secretary of the Treasury has discharged his statutory duty of stabilizing the foreign exchange value of the dollar by buying and selling gold at \$35 an ounce. The gold value of the dollar in world markets has been fixed, and a gold standard has been established and maintained by administrative action, in spite of the narrow restrictions imposed on dealings in gold and the holding of gold at home.

Up to the outbreak of war in September, 1939, Great Britain remained off gold. The Bank of England, as the agent to the Government, bought and sold gold and dollar exchange for the Exchange Equalization Account at varying prices. At first the rate of exchange approximated to \$5 to £1. England like America was the recipient of large sums of fugitive money from harassed Europe, and by March, 1938, the gold held by the Exchange Equalization Account and the Bank of England together had risen to £835 millions (nearly 120 million ounces, priced at 140s. an ounce). With Hitler's seizure first of Austria in March, 1938, then of the Sudetenland at the time of the Munich crisis in September, 1938, and at last of the remnant of Czechoslovakia in March, 1939,

the growing menace of war disqualified England as a refuge for the fugitive money. The vast accumulation of gold ebbed rapidly away, and at the outbreak of war (3rd September, 1939) had fallen to 58,000,000 ounces. After the Munich crisis the exchange had been allowed to drop to \$4.68; it was held at that rate till the outbreak of war, when it was fixed at \$4.03.

If gold was priced at \$35 an ounce and the pound at \$4.03, the value of gold worked out at 173s. 8d. But the export of gold was prohibited, and, even when it was permitted, the hazards of war raised the cost of sending gold across the Atlantic. The price at which gold was bought for the Exchange Equalization Account was fixed at 168s. an ounce. The Bank of England itself ceased to hold gold (except for a nominal amount). Its gold was transferred to the Exchange Equalization Account, and the fiduciary issue became practically the whole note issue.

Great Britain, and with it the Sterling Area and most of the world, was back on a gold standard. It was a gold exchange standard based on the United States dollar.

But during the war there were no free movements of gold. The United States bought gold from the monetary authorities of Great Britain and other countries at \$35 an ounce (less a commission or turn of .25 per cent.). But that did not mean that anyone in the world who wanted gold could get it at that price. Free convertibility of currencies into gold was everywhere suspended, and where dealings in gold were permitted, as in India and the Middle East, the price rose far above the equivalent of \$35—often more than double.

That was a hoarding demand in countries where inflation had gone to great lengths, and where war

conditions made the acquisition of pounds sterling or American dollars unattractive.

The wide discrepancies between the price of gold and rates of exchange, wherever the demand for gold could make itself felt, made the gold standard based on the United States unreal. Nevertheless the interchangeability of dollars and gold played a prominent part in war-time finance. In the eighteen months between the outbreak of war and the passage of the Lease-Lend Act in March, 1941, the British gold reserve and the output of gold in the Empire made an indispensable contribution towards paying for war supplies from the United States and other neutral sources. When Pearl Harbour (December, 1941) brought the United States into the war, their gold reserves had reached \$22,700 millions (649 million ounces). The withdrawal of \$2,700 millions to pay for war supplies from other countries made little impression on this vast total, and the prospect of the American dollar being maintained at its existing gold value was nowhere questioned.

That the supply of gold was redundant and further output from the mines was a waste of productive resources was recognized in measures for restricting output. From 40,000,000 ounces in 1941 the world's output was reduced to 28,000,000 ounces in 1945. That, however, was a war-time measure, and output is likely to revert to the high level previously reached.

The return to peace conditions has not as yet restored reality to the gold market. The official buying price in England has been raised to 172s. 3d. an ounce, and is tolerably close to the dollar price at a rate of exchange of \$4.03. But there is nothing like a free world market in gold, and the prices in India, Egypt and Greece are high and discrepant.

Under the Bretton Woods plan the International Monetary Fund will be based on gold. Every money unit will be assigned a gold parity, only to be altered in case of a "fundamental disequilibrium," and the function of gold in the discharge of international debts will be resumed. The free purchase and sale of gold for the settlement of international transactions at prices within prescribed fractions of parity is to be at any rate one method of stabilizing rates of exchange (Article IV (4) (b)). If that method is generally resorted to, the world market in gold will become a reality again.

CHAPTER VIII

A STABLE GOLD STANDARD

Stabilization of Purchasing Power

SYSTEMS have been devised in the past for stabilizing the purchasing power of currency units and making their value in gold variable. The best known of these is that proposed by Professor Irving Fisher in his *Purchasing Power of Money* in 1913.

Under Professor Fisher's scheme there was to be a monthly fixing of the price of gold so calculated as to offset any change in the price level. If in the month the price level had risen 1 per cent., the price of gold in currency units would be reduced 1 per cent. It would be possible, by observing price movements, for speculators to foresee a forthcoming change in the price of gold, and to make a profit in the interval before the date arrived for it to be actually made, and, in order to guard against such an abuse, Professor Fisher suggested that there should be an appreciable gap, say 1 per cent., between the buying and selling prices of gold, and that the monthly change should never exceed the amount of the gap. The selling price in any month would never be less than the buying price in the previous month, and the buying price would never be greater than the selling price in the previous month.

Price movements, however, might be much more rapid than 1 per cent. per month, and if the gap between buying and selling prices were made wide enough to offset any probable price movement, the plan would

cease to work automatically, and moreover speculation over a period of two or three months might become unduly attractive.

Keynes, in his *Tract on Monetary Reform* which appeared in 1923, advocated a somewhat similar plan, but with the price of gold adjusted, like Bank rate, every week. Even that would not get over the difficulty of speculation. In fact, in order to do so it is essential that the monetary authorities should have the power to act on any evidence of a price movement as promptly as the speculators themselves; they must use their judgment in the matter from hour to hour. If they are never committed, even for a short time, to buy or sell at a price to which they do not intend to adhere, they have nothing to fear from speculation. If the monetary authorities are aiming at a definite *attainable* objective, and the public know what the objective is, the speculators will actually assist them to attain it and will correct any deviation from it. It is when there is no objective or no known objective in monetary policy, or when the objective is no longer attainable, that the vagaries of speculation become formidable.

The objective adopted by Professor Irving Fisher and Keynes was the stabilization of the wealth-value of the monetary unit. President Roosevelt formulated the same objective as the basis of his monetary policy in 1933, and repeated it in a letter to Senator Thomas in August, 1937, on the occasion of hearings by a Committee on the Senator's bill for establishing a "commodity dollar": "the United States is still seeking the kind of dollar which a generation hence will have the same purchasing and debt-paying power as the value of the dollar which in the near future we hope to obtain. However, in view of the complexity of the rapidly shifting international

scene, it would at present be dangerous to adjust ourselves to any rigid pattern."

And at the World Economic Conference of 1933 the delegates of the British Empire, in their Declaration issued at the end of the Conference, after referring to the need for a rise in the price level, proceeded to the following pronouncement:

"As to the ultimate level to be aimed at, they do not consider it practicable to state this in precise terms. Any price level would be satisfactory which restores the normal activity of industry and employment, which ensures an economic return to the producer of primary commodities, and which harmonizes the burden of debts and fixed charges with economic capacity. . . . The Governments of the British Commonwealth should persist by all means in their power, whether monetary or economic, within the limits of sound finance, in the policy of furthering the rise in wholesale prices until there is evidence that equilibrium has been re-established, and thereupon they should take whatever measures are possible to stabilize the position thus attained."

Each country might go its own way, contented to secure internal monetary equilibrium and to leave rates of exchange to look after themselves. Some are found to argue that that is the right solution, the only course that will avoid intolerable alternations of inflation and deflation.

And if different national currency units were each held stable in purchasing power, the rates of exchange between them would almost inevitably be found to be themselves stable. There would indeed always be fortuitous variations in any country's balance of payments, but those which are clearly temporary are easily

absorbed. The most potent cause of disturbances in rates of exchange, changes in the purchasing power of one currency unit requiring corresponding changes either in the purchasing power or in the rate of exchange of another, would be eliminated. Internal stabilization itself might fail in a country, if for example war or emergency drove it to resort to excesses of inflationary finance. But so long as internal stabilization was successfully maintained, nothing could disturb the country's foreign exchange position except some sudden and great change in its economic circumstances, a deterioration of its exporting power or an increase in its need for imports. Apart from that exceptional contingency, a system based on internal monetary stabilization in each country taken separately would be bound to slip into a state of stable rates of exchange.

It might be expected that, even if rates of exchange gravitated towards their purchasing-power parities, they would nevertheless be perpetually subject to temporary variations, possibly sharp, about the average. But in practice no country will leave rates of exchange entirely to themselves. Otherwise any fortuitous rise or fall in the foreign exchange value of the currency unit may start a cumulative contraction or expansion of the consumers' income and outlay. A policy of internal stabilization would require any such movement to be corrected before its repercussions have been felt. Therefore the monetary authorities are bound to intervene in the foreign exchange market to smooth out its irregularities in some degree. If they do so, and there is no underlying force tending to alter the rates of exchange, the practical result will probably be to keep the rates unchanged. Therefore a group of countries each separately pursuing a policy of internal monetary stabilization

would be likely to drift into a state of constant rates of exchange.

Moreover those countries which hold large gold reserves could not afford to see the value of gold collapse. As has been pointed out above (p. 211), they would avoid flooding the market with excessive sales of gold. They would find themselves in the position of regulating the price of gold, and in practice that would soon mean keeping the price of gold fixed. The group therefore would have drifted back, not merely to unvarying rates of exchange, but to what would in effect be a gold standard.

The League of Nations Gold Delegation

In fact the gold standard, far from being a mere memory of a bygone phase, is a matter of present and practical concern.

In May, 1928, the Financial Committee of the League of Nations adverted to the Genoa Resolutions, which "dealt not only with problems arising from currency fluctuations in relation to gold, but also with undue fluctuations in the purchasing power of gold itself." The first stage contemplated by the Resolutions, the stabilization of currencies in relation to gold, was nearing its conclusion, and the Financial Committee proposed to consider how the League could most usefully assist in the study and solution of the problem of the second stage, the prevention of undue fluctuations in the purchasing power of gold.

In the summer of 1929 the Financial Committee appointed a "Delegation" or sub-committee, to "examine into and report upon the causes of fluctuations in the purchasing power of gold and their effect on the economic life of nations."

The final report of the Delegation appeared in June, 1932, and embodied their conclusions as to the nature and effects of fluctuations in the purchasing power of gold, and their recommendations for dealing with them in the future.

"Changes in the purchasing power of gold," says the Report (paragraph 183), "may originate on either side of the price-equation, from changes in the demand for money or in its supply. There is general agreement that price disturbances due to monetary factors should be avoided." This general agreement, however, stops short of using monetary policy as an instrument to correct fluctuations due to non-monetary causes. That the majority of the Delegation would not recommend.

The Report emphasizes the distinction between the long-term trend of prices and the short-term cyclical fluctuations. The long-term trend is treated as closely associated with the question of the adequacy of future supplies of gold, and the Delegation's recommendations in regard to it relate mainly to measures for economizing gold reserves (Section XV, paragraphs 207-24).

Among these measures the Delegation includes the use of the gold exchange standard, but the Report indicates two faults, disclosed by recent experience, which ought to be guarded against, that is to say (1) the risk of inflation through an indefinite extension of reserves, and (2) the dislocation caused by sudden transfers of liquid funds from one centre to another.

A price stabilization policy, such as that framed at Genoa, is in itself a safeguard against inflation. Nor has the experience of the gold exchange standard gained since then supplied any support for the fear of inflation. In the period from 1923 to 1928 when the gold exchange standard was in fairly effective operation, the price level

was falling rather than rising. The event which gave the signal for general deflation in 1929 was the change of policy on the part of the Bank of France, which ceased to buy foreign exchange, disposed of 6 milliards of the foreign assets it already held in that form, and began to absorb gold at the rate of 10 milliards in a year. It was the *reversal* of the previous adherence to the gold exchange standard in one important case that disturbed a pre-existing equilibrium.

As to the embarrassing transfers of liquid funds from one centre to another, it should not be overlooked that up to the time when the suspension of the gold standard in England had actually occurred, no trouble had been caused by transfers of the funds employed as Central Banks' reserves. Till then the withdrawals of balances had been by commercial banks and traders. It was only *after* the breakdown that a number of Central Banks started withdrawing their liquid assets from the United States in gold.

Thus there is really but little substance in these criticisms of the gold exchange standard. The loss sustained in 1931 by Central Banks which relied on sterling reserves was simply a consequence of that very instability of the value of gold that the Gold Delegation's proposals were designed to prevent.

In regard to the "desirability of measures being taken to reduce the range of the shorter-term cyclical fluctuations of prices," the Report proceeds:

"Whilst we attach the utmost importance to every effort being made to attain this object; while we are firmly convinced that the wide fluctuations in prices and the recurrence of periods of economic depression constitute the greatest threat to the whole economic organism to-day, we desire at the same time to emphasize

(1) that we do not consider it possible to avoid all oscillations in the general level of prices, and (2) that we are fully aware that even that measure of stability which we would all wish to achieve cannot be secured by monetary policy alone" (paragraph 185).

The former reservation would seem to be intended merely to repeat what the Delegation had already said as to the necessity for making allowance for non-monetary causes. Since the point is illustrated by a reference to changes due to a growth of efficiency, we may infer that the non-monetary causes can be identified with those referred to above (pp. 11 and 210) as affecting productivity, real costs, etc.

The Report continues: "The stability of the price level which we envisage as being practically possible is a relative, but not an absolute, stability of wholesale commodity prices as measured by their movement over a long series of years. We do not believe it is possible to eliminate short-term fluctuations of the price level, but we believe that these shorter-term fluctuations would be appreciably reduced in severity if the longer-term trend were relatively stable. Nor do we conceive the possible measure of stability as inconsistent with slow movements of the long-term trend either upward or downward. What it is desirable to avoid, as far as possible, are such violent price fluctuations as the world has recently witnessed" (paragraph 186).

Accordingly the Report proceeds to recommend a monetary policy "designed to avoid violent fluctuations of purchasing power" (paragraph 187). Monetary policy would continue to be guided primarily by gold reserves (paragraph 195) and would operate through the discount rate and open market operations (paragraphs 198-202).

"Day-to-day policy is primarily a national problem;

but it must be fitted to the general lines of policy designed to check the violent fluctuations of purchasing power by appropriate action taken after international consultation" (paragraph 197). Action must be based on a common interpretation of the various indices which reflect business activity. The Report recognizes the difficulties involved, but "major booms and depressions never recur at very close intervals. When business has been active without serious interruption for two or three years, special care and attention should be paid to all the signs of disequilibrium arising. As we have already stated, action, to be effective, must be taken in time, and it must be action based on international understanding and co-operation."

This recommendation approximates very closely to that made above (p. 104): "To prevent the cycle developing, all that is required is timely intervention by the Central Banks in the early stages. A very moderate restriction on credit expansion exercised at a time when business first threatens to become unduly active, even though there may have been no visible rise of prices, will suffice to keep control and to avoid the need for a more drastic contraction later on."

There is, however, a certain ambiguity about the recommendations of the Delegation. In the passage quoted from paragraph 186 they apparently abandon any hope of eliminating the short-term (cyclical) fluctuations, and merely propose to reduce their severity by making the longer-term trend relatively stable. They accordingly concentrate on preventing the "violent" fluctuations. These they have already specified sufficiently by saying that "there is a general agreement among almost all schools of economic thought as to the desirability of avoiding such violent fluctuations in prices

as were experienced during the war and post-war inflation, and during the deflation which set in so sharply after 1929" (paragraph 177).

Are we to draw the conclusion that the action based on international understanding and co-operation is only to be directed to the prevention of violent fluctuations of this type, and that the price fluctuations incidental to the trade cycle as experienced between 1819 and 1914 are to be acquiesced in? The phenomena of the cyclical depression, as described above (pp. 88-90), are precisely those characteristic of the depression of 1920-2 and of that which followed 1929. They differ only in degree and not in kind, and, if they were less acute on the earlier occasions, that does not mean that the recurrence of unemployment and financial crises was anything but a very serious evil.

In practice it would be quite impossible to tell, at the time when action first has to be taken to moderate trade activity, whether the depression to be avoided is of the "violent" type or not. The very measures which it is proposed to take to prevent the violent fluctuations of prices would of themselves be equally efficacious to prevent the more moderate fluctuations.

Perhaps the Delegation hoped to secure a wider support for proposals limited to the prevention of such violent fluctuations as the collapse of prices which had intruded itself on the attention of everybody during the preceding three years, than for correctives of the cyclical fluctuations which have become the study of experts, or perhaps they were anxious to avoid being accused of setting out to accomplish too much.

The Report lays down that: "The criterion of monetary and economic policies should be their success over

a period of years in maintaining the average level of wholesale prices of important international commodities relatively stable" (paragraph 193).

Presumably this does not merely mean that the price level should be the same at the end of the period of years as at the beginning, however violent the changes in the interval. Relative stability over a period of years must mean relative stability *throughout* the period. But whether it is to mean the limitation of fluctuations of the price level to those attributable to non-monetary causes, or whether it is to mean no more than keeping fluctuations attributable to monetary causes within such moderate limits that they cannot be called "violent," is left doubtful.

The Gold Delegation Minority Report

It was partly this ambiguity which led a minority composed of Sir Henry Strakosch, Sir Reginald Mant and M. Albert Janssen to add a note of dissent to the Report, and Professor Cassel to withhold his signature from the Report.

The three former advocated a stabilization of the commodity price level without any modification to allow for diminishing real costs. And they were less insistent on a restoration of the gold standard than the Majority. The Majority, while strongly recommending the gold standard as "the best available monetary mechanism" (paragraph 78), indicated certain conditions which had to be fulfilled before it could be restored (paragraphs 80-2). Of these conditions, the Minority took the same view regarding the need for settling the question of war debts and reparations, for the removal of restraints on international trade, and for gold movements being allowed

to make their due influence felt upon credit systems.* But whereas the Majority thought that monetary equilibrium should be restored in each country by adjusting costs to the international economic and financial position, the Minority advocated the restoration of equilibrium in the first instance by means of a rise of prices both in the gold standard countries and in the others.

The Majority regarded a rise of prices as desirable, but would not rely on monetary policy to bring it about.

"That a rise in the price level will take place," says the Report, "when confidence returns and industry revives, is scarcely to be doubted. Meantime it cannot be too strongly emphasized that whatever remedial action is undertaken in the monetary sphere needs to be supplemented by evidence of progress in the settlement of such perplexing and disturbing problems as reparations, international debts, disarmament and trade restrictions. Until there is some clearing of the atmosphere of international distrust and a modification of the obstructions to international trade, it will be difficult for that restoration of confidence and improvement in business to take place which is necessary to restore prices and standards of living to more satisfactory levels" (paragraph 176).

This view, that monetary policy must be conditioned by political and economic action, the Minority did not accept. That some political and economic conditions must be fulfilled before the gold standard can function

* The Minority include among the conditions for a re-establishment of the gold standard the following :

"That gold will be allowed to move freely and will not be unduly accumulated in any country without being allowed to exercise its normal influence in raising the level of prices." (*Note of Dissent*, p. 70.)

Yet this principle clearly conflicts with the stabilization of the price level. For when the world supply of monetary gold becomes redundant the surplus should be immobilized, just as when the supply becomes deficient gold should be economized.

smoothly they admitted, but their view as to the competence of monetary policy was clearly set out in the following passage (which relates to the feasibility of a policy of stabilization, but is equally applicable to *any* price policy): "The general price level is determined by the ratio between the supply of money (i.e. means of payment) and the demand. So long as supply keeps pace with demand, the price level will remain stable. The level may be disturbed by an alteration on either side of the equation—i.e. either (a) on the supply or monetary side, or (b) on the demand or non-monetary side. . . . Now so far as the ratio is concerned, it makes no difference from which side of the equation the disturbance comes, and, assuming that monetary policy can control the supply, it is clear that it is possible, theoretically at least, to maintain prices stable."

That is a matter to which we have already had occasion to advert (pp. 24-7, 207). The argument of the Minority is right. A Central Bank, which is the sole source of money, can vary the value of money to any required degree.

Monetary Policy and Political and Economic Conditions

Whatever the political and economic conditions may be, there is always at any moment a *best* monetary policy. A departure from the best policy is a wanton addition to whatever other economic troubles there may be. When a country has to adapt its monetary system to a world price structure which is distorted by disparities between different groups of values, it can at any rate frame its policy with a view to reducing the disparities, as reflected in its own price structure, to a minimum. If it fixes the value of its currency unit too high or too low, it will merely aggravate the disparities and create

new ones. An error of that kind is *an active source of harm* to the economic system. However unfavourable and difficult the political and economic circumstances may be, it is disastrous to let monetary policy drift.

That political and economic obstacles may interfere with a *permanent* settlement of monetary affairs is quite true. It may be that a permanent settlement should take the form of a gold standard with the appropriate measures for stabilizing the purchasing power of gold. If that is for the time being unattainable, then meanwhile a provisional policy must suffice.

Any danger of big and discontinuous disturbances of the balance of payments of a country is a difficulty in the way of adherence to a gold standard. That is why international debts, capital movements, and restrictions upon trade figure so largely in discussions of monetary policy.

When a country with an inconvertible paper currency has to meet a big external obligation, or when it finds itself cut off from its usual export markets, it can adapt itself to these conditions by means of a depreciation of its currency unit. The purchasing power of the country in world markets is thereby automatically reduced without any compression of the consumers' income and outlay.

But if the country is on the gold standard, it must reduce its purchasing power in world markets by a compression of the consumers' income and outlay. Unless wages are correspondingly reduced, that means a shrinkage of profits and an increase of unemployment.

It has been show above (pp. 57 and 227-8) that such fluctuations in the balance of payments as are likely to arise in the normal course of economic activity are not likely to impose a very severe strain on the monetary system. The real threat to the gold standard arises from fluctuations in the value of gold itself.

And the very conditions which the Gold Delegation pointed to as obstacles to the restoration of the gold standard were themselves, for the most part, the direct consequences of the appreciation of gold. That is certainly true of the impediments to international trade. And though war debts, reparations and other international obligations were not so caused, it was the appreciation of gold which increased the burden on the debtors, and at the same time impaired the working of the economic system, so that the debtors had a diminished production of wealth out of which to pay their increased burdens.

Much has been said of the "imprudence" of lenders and borrowers in the period up to 1929. But the great majority of the loans that came to be so regarded were entirely sound and prudent when they were contracted, and only became unsound through the changes in the value of the unit in which they were reckoned.

The Report of the Gold Delegation looked forward to a rise in the price level "when confidence returns" (above, p. 236). What is "confidence"? In the period of inflation, 1919-24, confidence meant confidence in the currency, confidence that the value of the unit would rise and therefore that the price level would fall. In the period of deflation it meant confidence in commodities, and in the solvency of those who produce or hold commodities; it meant confidence that the price level would rise and therefore that the value of the unit would fall. Much confusion is caused by failure to distinguish between these two kinds of confidence.

International Co-operation

The Gold Delegation, Majority and Minority alike,

assumed that the stabilization of the purchasing power of gold necessarily involves international co-operation on a comprehensive scale.

When the World Economic Conference met in London in 1933 the various sub-committees set up included one on Technical Monetary Problems. Among the resolutions submitted to this sub-committee was one stating the general principles by which Central Banks' monetary policy should be guided. It ended with the following passage:

"Since . . . the proper functioning of the gold standard requires in the first place the adoption by each individual Central Bank of a policy designed to maintain a fundamental equilibrium in the balance of payments of its country, the discretion of each Central Bank in regulating the working of the gold standard in its own country should remain unimpaired. Central Banks should, however, recognize that in addition to their national task they have also to fulfil a task of international character. Their aim should be to co-ordinate the policy pursued in the various centres in order to contribute towards the satisfactory working of the international gold standard system.

"Moreover they should endeavour to adapt their measures of credit regulation, as far as their domestic position permits, to any tendency towards an undue change in the state of general business activity. An expansion of general business activity of a kind which clearly cannot be permanently maintained should lead Central Banks to introduce a bias towards credit restriction into the credit policy which they think fit to adopt, having regard to internal conditions in their own countries.

On the other hand, an undue decline in general

business activity in the world at large should lead them to introduce a bias towards relaxation.

"In pursuing such a policy the Central Banks will have done what is in their power to reduce fluctuations in business activity and thereby also undue fluctuations in the purchasing power of gold.

"With a view to arriving at an agreed interpretation of the data revealing the tendency of developments in general business activity, and at an agreed policy, Central Banks should consult together continuously, each Central Bank, in case of difference of opinion, acting on its own judgment of the situation."

Agreement on the resolution was not reached, but the only dissentient was the representative of the United States, who considered discussion of the question premature, "it being understood that the Federal Reserve Banks would be glad to confer at an opportune time with other Central Banks on questions of this character to the extent that they are compatible with national policies."

If the gold standard is to be reinstated as the basis of an international system, some safeguard against undue fluctuations in the purchasing power of gold will be an essential condition of the permanence of the system. The resolution of 1933 points the way to such a safeguard. In fact it may be regarded as elaborating the principles laid down at Genoa in 1922 for the regulation of credit.

The "Bias" in the Regulation of Credit

An international body to take decisions is not required. The Central Bank in each country will assume the sole responsibility for the regulation of credit. It will be

free to restrict credit when the exchanges are becoming adverse, or to relax credit when they are becoming favourable. But the Central Bank will not confine its attention to the *relative* position of its own country as indicated by the foreign exchanges. It will take account also of the trend of economic activity in the world generally. At a time of activity there will be some countries enjoying favourable exchanges and an inflow of gold. If there are signs of the activity gaining momentum too fast and degenerating into inflation, they will not relax credit to the extent that the favourable exchanges would justify. They will maintain relatively high discount rates and apply other restrictive measures, leaving the countries with unfavourable exchanges to apply more restrictive measures still.

On the other hand, at a time of depression the countries with favourable exchanges will relax credit as far as they can, reduce their discount rates to a minimum, and repel an inflow of gold by buying securities or foreign exchange.

The "bias" thus given in the one case in the direction of contraction and in the other in the direction of expansion will counteract the tendency towards an excess or deficiency of activity and so will correct any movement towards rising or falling prices. A *rigid* adherence to a fixed price level measured by an index number is not required. Indeed though the wealth-value of a currency unit in the given economic conditions of a particular moment of time is quite properly measured by the inverse of an index number of prices, it must not be forgotten that the conditions change with the passage of time. As we saw above (pp. 11, 84 and 210), technological progress cheapens production, and it is quite consistent with the ideal of stability that prices in terms

of money should fall correspondingly. Similarly a rise in the price level, in so far as it is attributable to scarcity of any natural products, should be allowed to occur.

But if we interpret stability in this way, the price level is no longer the fixed point in the system. Our new fixed point will be the *wage level*, the importance of which in the determination of monetary equilibrium we have so often had occasion to recognize. The conclusion indicated is that the monetary system should be so managed that a change in the wage-level is never required. What would be stabilized would be the price of labour, the payment for the time of an ordinary man with no special skill or exceptional qualifications. If a greater proportion of skilled labour were employed, the *average* wage would rise, though the basic wage remained unchanged. The progressive improvement of the position of working people would take the form not of rising money wages but of falling prices.*

Whenever the wage level so understood *changes*, a corresponding monetary change is required to arrive at a new equilibrium, and the monetary change will be reflected in the gold value and the foreign exchange value of the currency unit, unless a similar change has taken place in other gold standard countries. Changes in the relative economic power or efficiency of the countries participating in an international stabilization system might necessitate changes in their relative wage levels. There would be some advantage in a gradual increase in money wages in the countries that gain in economic power so as to avoid the painful choice between a reduction of wages and a devaluation of the currency in any country that is falling behind. Such an increase is contrary to the principle of stabilization, but a very

* See my *Art of Central Banking*, Chapter V.

slight and gradual increase should suffice to ease the strain without involving the evils of inflation.

A Credit Deadlock

The plan presupposes that each country *can* control its own monetary situation. The world became painfully familiar in the nineteen-thirties with a condition in which the ordinary methods of credit relaxation failed to evoke a monetary expansion in the essential sense of an enlargement of the *flow* of money, the engendering of incomes and through them of the demand for products. There was a deadlock.

But the deadlock arose out of excesses of deflation. The monetary systems of the world were subjected to a strain such as had never been applied to them before. Traders could not be induced to borrow on any terms however favourable, because they could see no prospect but of loss in any use they might make of borrowed money. The creation of credit was suspended, and even when the banks created deposits by buying securities, the money did not circulate.

Under the more moderate strains of the trade cycle of the nineteenth century, it was always possible to stimulate trade borrowing by means of cheap money. Under a gold standard based on a stabilized wealth-value of gold, fluctuations would be slighter and strains lighter even than in the nineteenth century.

So long as industry in any country is normally active and profitable, there is a perpetual pressure on the banking system to lend to traders, and the regulation of credit is achieved without difficulty. The banks have to resist the demands of trade borrowers, partly by charging a sufficiently high short-term rate of interest, partly by a

direct limitation of their advances. Any tendency to inflation and undue activity can be corrected by accentuating these restrictive measures, and any tendency towards depression and a slackening of activity can be corrected by relaxing them. This condition of activity, and potential demands on the banking system is dependent on the continuance of an adequate flow of money, and it is the regulation of credit itself which ensures that adequate flow.

If, nevertheless, any one country in an international system became involved in a credit deadlock, so that, in spite of cheap money, its purchasing power fell off, and it had a deficiency of imports, the exchanges would become favourable to it. If it absorbed gold, there would be a danger of the contagion of deflation spreading to other countries. But that could be avoided if the Central Bank bought foreign exchange instead of gold. If normal activity prevailed in the other countries there should be no great difficulty in surmounting the deadlock.

A Flight from the Currency

One of the most troublesome causes of disturbance in monetary systems has been the migration of large amounts of liquid funds from one financial centre to another. If an international metallic standard is to work successfully in the future, it must be capable of sustaining these movements. But the movements themselves are the result of distrust of currencies. It is when the purchasing power of a currency unit has become intolerably high, or in other words the price level in terms of the unit has become intolerably low in relation to the wage level and the debt structure, that people begin to think a depreciation of the unit inevitable. There is not only

a rush of speculators to buy foreign currencies, but traders hasten their purchases and delay their sales of foreign currencies employed in the ordinary course of their business. That is what is called a "flight" from the currency. Under stable conditions it is very much less likely to occur, for the purchasing power of the currency unit will never become intolerably high. A flight from the currency will only occur when a war or some other great financial strain is expected to cause inflation and to make the maintenance of the gold standard impossible.

Against inflationary finance no monetary system can be immune. If a gold standard stabilized by international co-operation were established, any country which lapsed into excesses of inflationary finance would have to drop out. On the other hand if a country were exposed to something in the nature of a flight from its currency in conditions in which the other participating countries were satisfied that there was no real ground for distrust, they could support it either by offering the country credits or by buying exchange on it.

An International Monetary System

It will be observed that the working of an international monetary system would be greatly facilitated if the participating countries had sufficient confidence in one another's currency units to buy and hold foreign exchange.

The danger of a scarcity of gold, which was the ground for the recommendation at Genoa in favour of reserves of foreign exchange, is no longer a cause of anxiety. But some use of such reserves would introduce a very desirable element of elasticity into an international gold standard system.

The Resolution of 1933 does not insist on an agreed interpretation of the data bearing on business activity. In case of a difference of opinion each Central Bank is to act on its own judgment of the situation. That is a thoroughly practical course, because the facts themselves will resolve all doubts. So long as it remains really doubtful whether or not there is a tendency to disequilibrium calling for corrective action, it probably does not matter very much what kind of action is taken. When a decided tendency either to depression or to excessive activity is revealed, it is to be hoped that there will no longer be any difference of opinion.

Thus the plan put forward in 1933 preserves the maximum of freedom and independence for the monetary authorities of each country, and at the same time a recognition of their international task. It is so entirely to the interests of all concerned that the system should work that any more binding agreement would be unnecessary.

The Bretton Woods Plan

President Roosevelt's Administration, even amid the most exacting preoccupations of the war, was fertile of ideas for the future economic rehabilitation of the world. Conspicuous among their plans was one for international co-operation in the sphere of money and foreign exchange. The plan for an International Monetary Fund adopted by a gathering of experts from the United Nations at Bretton Woods in July, 1944, is now in course of being put into operation.

The primary aim of the plan is to facilitate the maintenance of stable rates of exchange among the member countries, and to limit changes in rates to such

as are required by a "fundamental disequilibrium."

Gold is to be retained as an international medium; every money unit is to be given a gold value by which rates of exchange on all other money units will be determined. The gold value or parity is not irrevocably fixed. In case of a fundamental disequilibrium it can be altered, and with it the rates of exchange. And the Board of Governors of the Fund can, if need be, make a uniform proportional change in *all* gold parities, thereby altering the money value of gold without disturbing mutual rates of exchange.

Is this a gold standard? If the gold value of a money unit is liable to be altered, gold cannot without qualification be called the standard. Yet gold is the *only* standard which the Bretton Woods plan countenances. Even the gold standard of the classic type was unchangeable only in the sense that the legislation which established it did not provide for change; the gold value of the money unit could none the less be changed at any moment by an act of the legislature.

The Bretton Woods plan seeks to codify the conditions which permit a change of gold parity, and thereby it imposes limits to which the unfettered discretion of an independent legislature would not be subject. By it money will be tied more closely to gold than by the former gold standard.

In mitigation of this bondage, however, it not only allows changes of gold parity in circumstances deemed to justify them, but it makes provision for supplementing the gold reserves of member countries. The International Monetary Fund is subscribed by all the participating countries, partly in gold, partly by each in its own currency. The Fund constitutes a central reserve of foreign

exchange on which all can draw within defined limits.*

This part of the plan is reminiscent of the gold centres of the Genoa Conference. But instead of a member country holding a reserve of foreign exchange at a selected gold centre, it is given the right to buy exchange on any other member country, within the limits allowed by the quota system of the Fund. The effect in either case is to provide a reserve other than gold in addition to the gold held.

But here the parallel to Genoa stops. The Genoa plan was primarily concerned with preventing undue fluctuations in the purchasing power of gold. It was to make this possible that economies in the use of gold for monetary purposes were recommended at a time when the world's stock of gold was likely to prove inadequate to maintain the existing world price level.

Those concerned with monetary problems both at Genoa in 1922 and at the World Economic Conference in London in 1933 recognized that it is by credit policy that the wealth-value of money is determined. The economy of gold which they recommended on both occasions was liable to lead to an excessive monetary expansion, and it was essential to accompany it with a credit policy which would deliberately restrain either expansion or contraction.

Nothing of the kind appears in the Bretton Woods plan. There is, it is true, the power to alter the money value of gold by a general change of gold parities, all in the same proportion. But the power to do so could only be usefully invoked if an excess or deficiency of gold reserves were threatening to cause an undesirable monetary expansion or contraction. And that could only be

* A member cannot draw more in all than the equivalent of the quota contributed by it to the Fund, nor more in any one year than 25 per cent. of its quota.

through the reaction of gold reserves on credit policy.

What then is to be the relation between credit policy and gold reserves? The Genoa plan was to emancipate credit policy from gold. Credit policy could not altogether disregard reserves, but if gold were supplemented with reserves of foreign exchange, the adequacy of the reserves to a credit policy which stabilized the wealth-value of money could be ensured. The contingency of a superfluity of gold was not explicitly dealt with, but the fundamental principle of stabilization of wealth-value would evidently require either a sterilization of the excess gold, or an increase in the gold value of money units.

But the Bretton Woods plan effects no such emancipation from gold; it recognizes no other standard than gold. If the member countries have no other principle to guide their credit policy, they must look to their gold reserves.

Are we to suppose that the credit policy of each country will depend on its reserve position, but that the Governors of the Fund will intervene from time to time to modify reserve positions by a general increase or decrease of gold parities? Surely not. A change of parities is not a measure to be frequently employed; it involves embarrassing book-keeping losses or gains on gold holdings, and, if anticipated, invites undesirable speculative movements in bullion (above, pp. 225-6).

Moreover the change of parities can only *give the signal* to the Central Banks to make the appropriate change of credit policy. If they are agreed, through their representatives on the International Monetary Fund, that the change of credit policy ought to be made, they may just as well make it without waiting for a signal. They can face very wide variations in their reserves

without having to allow their credit policy to be deflected. Only a seriously embarrassing redundancy or deficiency of gold would demand a general revision of parities.

In the Bretton Woods plan the conception of a stabilization of the wealth-value of a money unit finds no place. The plan is one for an international gold standard modified by devices to avoid deflationary measures. Gold reserves are to be reinforced by quotas; the gold value of a money unit is to be adjustable in case of a fundamental disequilibrium; or the gold value of all money units is to be adjustable in case of an excess or deficiency of the world's gold. But subject to these qualifications, credit policy is to be governed by reserve positions.

The plan is intended to guard against the danger of a monetary contraction causing depression. Against a monetary expansion it offers no safeguard. As we saw above (pp. 43-4), an international gold standard, while compelling countries to keep pace with one another in a monetary expansion, does nothing to check the expansion till a shortage of gold makes itself felt in a deficiency of reserves. The deficiency of reserves gives much too tardy a signal for stopping the expansion (above, pp. 87-8 and 91), and, by the time it becomes operative, a *contraction* becomes necessary to restore equilibrium.

The Bretton Woods plan abhors contraction, and contraction can be avoided by a general reduction of gold parities. But that will only open the way to a renewed expansion. The idea that unlimited expansion can be tolerated is a fatal misconception.

A monetary expansion of the moderate extent characteristic of the active phase of the nineteenth-century trade cycle caused no great disturbance. But the monetary expansion of 1919-20, even in America where

the dollar was freely and effectively convertible into gold, was felt to be destroying the very fabric of the pecuniary relations on which economic life depends.

The world's stock of monetary gold has been swollen by the enormous output of recent years and is double what it was in 1929. The gold value of the American dollar has been reduced by 40 per cent. since that year, and the gold value of the pound by 50 per cent. So far as the maintenance of gold reserves is concerned, there is ample room for a monetary expansion far exceeding that of 1919-20 within the bounds of the gold standard, without calling in aid the power of reducing gold parities under the Bretton Woods plan.

Therefore what is to be feared in the near future is not a succession of expansions each culminating in a general devaluation of money units, but an uninterrupted expansion which everyone will recognize as excessive and extravagant when it is still far short of causing a shortage of reserves. Eventually the monetary expansion must be checked, and the longer the necessary action is delayed by a general reluctance to resort to measures of contraction and deflation, the greater will be the dislocation and distortion of pecuniary relations. At last all objections to the necessary measures will be swept aside, and the pressure of public opinion will insist on them. Depression will result.

But why, it may be asked, should public opinion demand a reversal of the expansion? Why should it not be content with stopping it and leaving the wealth-value of the money unit at the level to which it has fallen? Perhaps that would be the wisest course. Once the wealth-value of the money unit has fallen, the harm is done; a restoration of its wealth-value, even if it remedied

hardship and injustice in some cases, would cause new hardship and injustice in others.

Let the money unit remain then where it is; let there be no actual contraction yet no renewal of the expansion. But that is no more nor less than a *stabilization of the wealth-value of the unit*. If it is to be stabilized at last, why not at first? Is it necessary to go through the calamitous experience of an extravagant, monetary expansion before settling down to a policy of stability?

There is nothing in the Bretton Woods Plan to *conflict* with a policy of stable wealth-value, but the plan is far from dispensing with the need for such a policy. Without it all the hopes of stabilizing rates of exchange and maintaining full employment are likely to be disappointed.

APPENDIX

GOLD HOLDINGS, 1920-32

(Millions of old U.S. dollars of 23.22 grains)

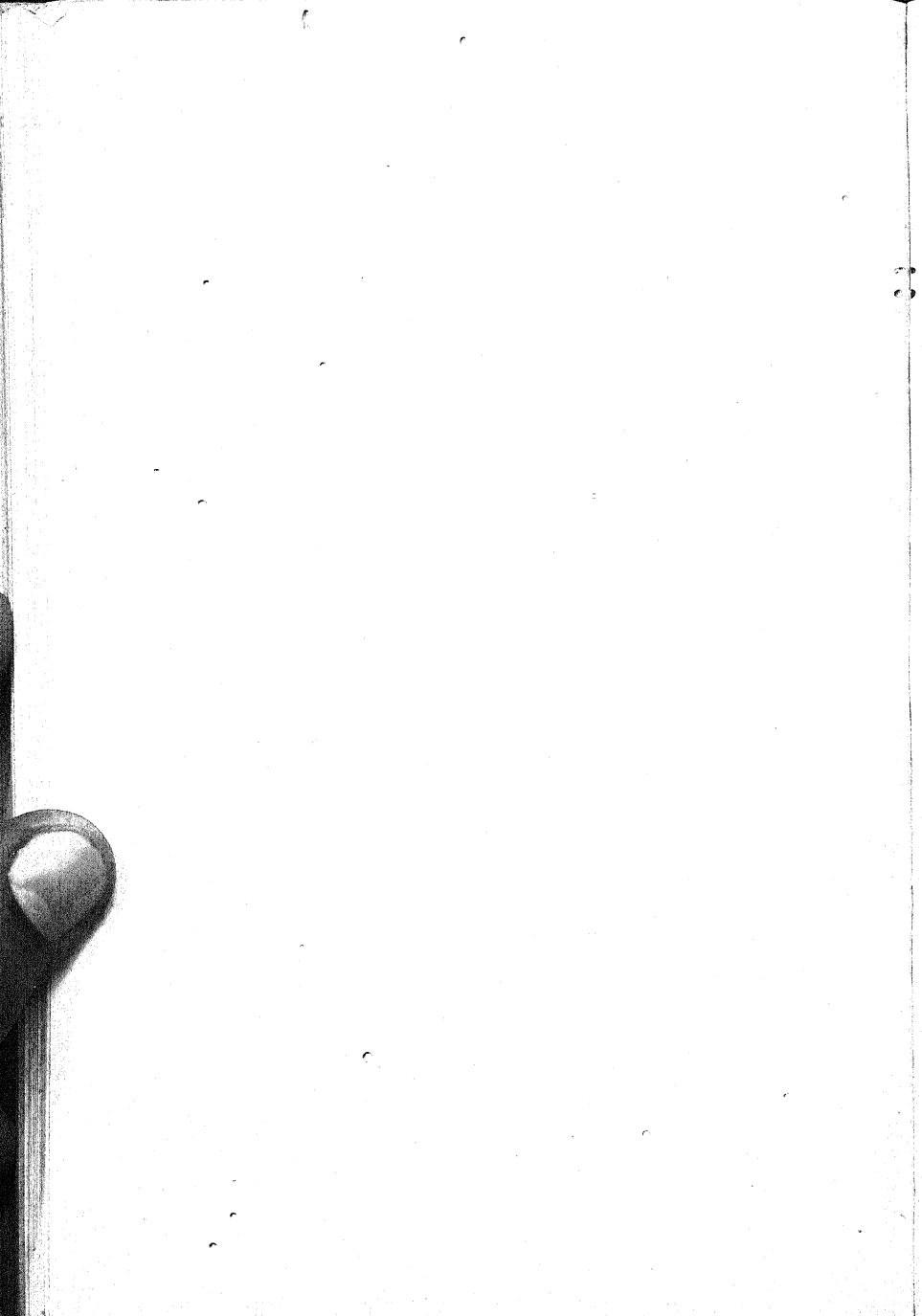
	Dec. 1920	Dec. 1924	Inc. or Dec.	Dec. 1928	Inc. or Dec.	May 1931	Inc. or Dec.	Dec. 1931	Inc. or Dec.	Mar. 1932	Inc. or Dec.	June 1932	Inc. or Dec.
Austria	...	2	+ 2	24	+ 22	30	+ 6	27	- 3	25	- 2	21	- 4
Belgium	51	52	+ 1	125	+ 73	201	+ 76	354	+ 153	349	- 5	357	+ 8
Czechoslovakia...	4	27	+ 23	34	+ 7	46	+ 12	49	+ 3	49	...	...	...
Denmark	61	56	- 5	46	- 10	46	...	39	- 7	39	...	36	- 3
France	968	977	+ 9	1,271	+ 294	2,181	+ 910	2,699	+ 518	3,012	+ 313	3,218	+ 206
Germany	260	181	- 79	650	+ 469	569	- 81	234	- 335	209	- 25	198	- 11
Hungary	...	7	+ 7	35	+ 28	20	- 15	18	- 2	17	- 1	17	...
Italy	204	218	+ 14	266	+ 48	280	+ 14	296	+ 16	296	...	298	+ 2
Netherlands	256	203	- 53	175	- 28	181	+ 6	357	+ 176	354	- 3	394	+ 40
Norway	39	39	...	39	...	39	...	41	+ 2	42	+ 1	40	- 2
Poland	3	20	+ 17	70	+ 50	64	- 6	67	+ 3	64	- 3	54	- 10
Roumania	35	48	+ 13	49	+ 1	53	+ 4	58	+ 5	57	- 1	56	- 1
Spain	474	489	+ 15	494	+ 5	468	- 26	434	- 34	434	...	435	+ 1
Sweden	75	63	- 12	63	...	64	+ 1	55	- 9	55	...	55	...
Switzerland	105	98	- 7	103	+ 5	124	+ 21	453	+ 329	471	+ 18	503	+ 32

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United Kingdom	763	757	— 6	750	— 7	735	— 15	588	— 147	588	...	663	+ 75
Yugoslavia	12	14	+ 2	18	+ 4	19	+ 1	31	+ 12	31	...	31	...
Canada	196	209	+ 13	191	— 18	170	— 21	143	— 27	135	8	134	— 1
United States	2,942	4,597	+ 1,565	4,142	— 365	4,798	+ 656	4,460	— 338	4,390	— 70	3,918	— 472
Argentina	474	444	— 30	607	+ 163	362	— 245	253	— 109	249	— 4	249	...
Brazil	33	54	+ 21	149	+ 95	...	— 149	...	...	...	...	...	...
Chile	33	34	+ 1	7	— 27	7	...	12	+ 5	11	— 1	12	+ 1
Colombia	...	7	+ 7	24	+ 17	10	— 14	9	— 1	7	— 2	13	+ 6
Peru	21	21	...	21	...	18	— 3	17	— 1	13	— 4	11	— 2
Uruguay	57	57	...	68	+ 11	58	— 10	53	— 5	52	— 1	50	— 2
India	116	109	— 7	124	+ 15	147	+ 23	162	+ 15	162	...	162	...
Japan	557	586	+ 29	541	— 45	422	— 119	234	— 188	214	— 20	214	...
Java	88	54	— 34	68	+ 14	46	— 22	45	— 1	42	— 3	42	...
Egypt	16	16	...	19	+ 3	21	+ 2	21	...	31	+ 10	33	+ 2
South Africa	50	53	+ 3	39	— 14	32	— 7	39	+ 7	31	— 8	38	+ 7
Australia	211	219	+ 8	223	+ 4	74	— 149	52	— 22	52	...	52	...
New Zealand	37	37	...	32	— 5	34	+ 2	32	— 2	31	— 1	30	— 1
	8,141	9,658	+ 1,517	10,467	+ 809	11,319	+ 852	11,332	+ 13	11,512	+ 180	11,383	— 129

Note.—These data have been compiled mainly from the Annex to the Report of the League of Nations Gold Delegation, and from the tables of gold reserves regularly published in the *Federal Reserve Bulletin*.



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